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MODERN PHILOSOPHERS

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BY

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PREFACE

IN my work on the *History of Modern Philosophy* (which appeared in the Danish edition 1894-95), I stopped short with the year 1880. I set up this year as my limit for several reasons. In the first place, a more or less provisional settlement was arrived at, at this point, in the debate and reaction between the two great lines of thought of the nineteenth century, the Romantic and the Positive. Both had worked out their consequences, and in some measure found their correctives. A temporary breathing-space had been attained in the views of which Lotze and Spencer are types, and in the recently revived Critical philosophy. To be sure, new endeavours had appeared side by side with these. But they had not yet been moulded into clear and definite tendencies. In the second place, the treatment and valuation of immediately contemporary thought are subject to conditions different from those governing the presentation of philosophical phenomena which come under consideration historically complete. A psychological and biographical elucidation is no easy

matter. And yet here if anywhere in the philosophical sphere such an elucidation is rendered necessary by the intimate reciprocal relations of thought and personality. The method of treatment must, consequently, be another than when the inquiry concerns tendencies which belong more decidedly to the past. And in the third place, my own more independent philosophical labours begin somewhere about the year 1880. This, too, helps to render it less easy for me to take up an objective standpoint with regard to the works of others which have appeared in the meantime.

When I cast about for what I take to be the most significant characteristic of the philosophical activity during the last quarter of a century, it is borne in upon me that the personal factor will be found to have asserted itself more strongly in this than in my earlier work. This factor will be found to take an active part both in the choice of the representative and in presentation and judgment. This is the reason why I have published the present volume as an independent work, and not as simply the third part of my *History of Modern Philosophy*.

If I must begin by calling attention to a peculiarity of the most recent philosophical speculation, it must be this, that it is still more difficult to classify than the philosophy of earlier times. The more profoundly one studies philosophy, the more one comes to realise how little worth are the wonted rubrics, all the many

“-isms.” The essence and operation of both thought and existence are far too many-sided for any such external arrangement to be possible. One fact in particular is always claiming fresh attention, namely, how a philosophical movement is as much a thought-construction as a sign of the times. Philosophy is a treatment of problems as well as a symptom; and at the present day its appearance in this two-fold rôle is sharply defined. Partly it is that existence presents to us a continually increasing complexity of aspects in ever greater depth and multiformity. Partly it is that we are paying more and more attention to the co-operation and consonance of the subjective factors in all thought. In both connections—we may call them respectively the objective and the subjective aspects of philosophy—contemporary philosophy advances with firmer tread than did that of former times.

The necessity of observation, of analysis, of criticism, of objective coherence, is more strongly emphasised than was formerly the case; and stronger than in former times is the stress laid upon the subjective choice of standpoint, starting-point, and conclusion. Yet (and perhaps this is the most characteristic trait) it is not right to take this as an irreconcilable contradiction. One holds fast, rather, to the calm conviction that the objective and the subjective lines of thought will finally effect a conjunction.

We shall find philosophical personalities convoyed

in their speculative expeditions now by more objective, now by more subjective principles. Wilhelm Wundt and Ernst Mach went over from Science to Philosophy ; and even pure scientists like Clerk Maxwell and Heinrich Hertz, desirous as they were of remaining within the bounds of their own province, felt, nevertheless, the need of co-ordinating the primary postulates which served them as ground-principles. In this way they came into contact with philosophy. We shall find Roberto Ardigò led on from Catholic theology to Critical and Positivist speculations, without sudden rupture it is true, yet in such a way that a long period of reflection leads him gradually to an attitude peculiarly Positivist. Friedrich Nietzsche begins with Philology and the History of Culture. The culture problem, appearing as it does to him within narrow historical limits, inspires him with passionate reflections, such as lead him through mighty critique and polemic, to an ideal construction in which fancy and sentiment join in the work of thought. William James' first studies lay in the field of medicine. A starting-point for his philosophy is afforded by psychological interest, especially in the psychical phenomena incident to will, belief, and hope. Thus he is especially apt for the psychology of religion. With such men as F. H. Bradley, Richard Avenarius, Jean Marie Guyau, and Rudolf Eucken, the philosophising impulse would seem to be awakened more directly, albeit with them, too, it

appears under individually varying forms. We all philosophise, as a matter of fact ; although—as a result of the multiplicity of inner and outer relations—but few of us attain to a coherent work of thought. “A hundred men may dabble in a matter, but one alone among them is a sage.”

We may work out an arrangement of the most important philosophical phenomena of the last quarter of a century by distinguishing three groups or tendencies.

The Systematic tendency is represented by a group of thinkers who set out with the special object of elucidating the problem of existence, and endeavour in this way to evolve a coherent view of the world. Such men are Wundt, Ardigò, Bradley, and Fouillée. With another tendency, the Epistemologico-biological, the problem of knowledge takes pride of place. The prime object of its endeavours is to find the simplest way in which the claims of the thought-life may be satisfied, the thought-life being treated as itself a special sort of life, obeying the laws of life in general. To this category belong such men as the scientists Maxwell, Hertz, and Ernst Mach. The most characteristic product of this tendency is Richard Avenarius' attempt to give a natural history of problems. A third tendency busies itself essentially with the problem of value. This philosophy of value takes up the fundamental problems of ethics and religion, and seeks to elucidate

or to solve them from new points of view. With Guyau and Nietzsche the dominant factor is the subjective. With Rudolf Eucken this interest coincides with a speculation, the object of which is to prove the necessity of objective validity, if subjectivity is not to be completely dissipated into thin air. William James handles the problem of value in an investigation into the psychology of religion. In this his object is to provide a general orientation of the nature of religious life by way of a description of various religious types. Within all three groups psychological observation and analysis play an important part; so that the four-fold problem, to which I concluded on historical lines in my *History of Modern Philosophy*, and which I endeavoured to determine and establish more closely in my essay on "The Problems of Philosophy," is ratified here also.

I hope to be able to find my way through the main points of the three above-mentioned groups of modern thinkers into the thought world of the present time.

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I. MODERN PHILOSOPHERS

FIRST GROUP

OBJECTIVE-SYSTEMATIC TENDENCY

I

WILHELM WUNDT

1. WUNDT furnishes a great example of the prodigious working capacity of the German. No other living philosopher surpasses him in width of knowledge, in the faculty of gathering up his manifold information under general points of view, and in the indefatigable effort to produce precision and clarity in details, small and great, as well as in the completed whole. He does not possess Lotze's delicacy and fervour, but he stands more broadly and solidly on the foundation of reality, and does not venture so far into metaphysic as does Lotze. Compared with Spencer, he is more of an idealist. Starting from the broad ground of experience, he labours upwards towards the summit of thought. This the philosophy of the Romantic school believed that it had climbed. But, according to Wundt, who is here animated by Kant's critical attitude, it is only one of the higher points on the horizon by which we direct our path.

Wundt was born on August 16, 1832, in the neighbourhood of Mannheim. He became a medical student, and was stimulated to philosophy through his physiological studies. His *Contributions to the Theory of Perception* (1859-62) are more particularly concerned

with the influence of eye-movement on the apprehension of space. At the *Naturforschertag* at Speier in 1861, he delivered a lecture on physiological time, *i.e.* on the time consumed between the apprehension of a sense-impression and the reaction. In the *Lectures on Human and Animal Mentality* (1863; 3rd ed. 1897), the ethnological method is applied side by side with that of physiological experiment. After he had worked for a number of years as Professor Extraordinary of Physiology in Heidelberg, he became, in 1874, Albert Lange's successor as Professor of Inductive Philosophy at Zurich; but, in the very next year, he accepted the chair of Philosophy in Leipzig, where he is still at work. Wundt's life and the course of his studies mean the same. His personality is not greatly prominent in his works; to those who come into personal relation with him he presents a gentle ardour, a frank cordiality, and a calm intellectual enthusiasm.

Shortly before Wundt went to Leipzig he published his *Physiological Psychology* (1874), which is, next to Fechner's *Elements of Psychophysics*, a masterpiece of experimental psychology. This book treats generally of the methods and the physiological grounds of psychology, and only those divisions of psychology are treated in detail which can find their particular elucidation along this line. Description and analysis are overshadowed by experiment. Wundt later published a more uniformly exhaustive treatment of psychology in his *Groundwork of Psychology* (1896). In Leipzig he erected an Experimental Psychological Laboratory, the first university institution of this kind, and began the issue of the journal, *Philosophische Studien* (20 vols. 1883-1903).

Concerning the importance of his studies in experimental psychology for his transition from physiology to philosophy, Wundt makes some interesting remarks in his article "On Psychological Causality and the Principle of Psycho-physical Parallelism" (*Phil. Stud.*, 1894, pp. 122-4). They convinced him that psychology is independent of physiology and metaphysic, a view which, indeed, the English school and Kant had already advocated. "If I were asked," he says, "wherein the psychological value of experimental observation has consisted and still consists for me, I should reply that it has engendered in me an entirely novel outlook upon psychological processes, and has continued to corroborate it. When I first entered upon psychological problems, I shared the prejudice generally common to physiologists, that the production of sense-impression was a work of the physiological properties of our sense-organs only. I learned first in the case of the operations of vision (especially where spatial perception was concerned) to conceive an act of creative synthesis, and this gradually led me to acquire a psychological understanding of the higher functions of imagination and reason, towards which no help was forthcoming from the old psychology. When I then went on to investigate the temporal relations of the flow of ideas, there opened before me a new insight into the development of the function of volition (namely, through the influence of preparation and the effort to abbreviate physiological time), the external developing out of the internal, the manifold out of the simple—an insight at the same time into the close coherence of all that had, through the use of artificial abstractions and terminology (such as Idea, Feeling, Will), been regarded as disparate psychical

functions ; in a word, into the indivisibility and homogeneity of psychical life at all its stages."

Wundt in this way arrived at the conception of synthesis, whither Kant, in his time, had attained through analysis of the reasonable faculties and of the apprehension of space and time. By "creative synthesis" he understands a collection and composition, the product of which possesses properties which neither of the moments possessed on its own account. Wundt not infrequently overlooks the fact that this conception gives no explanation, however suitable it may be for the description of the characteristics of psychical process. Especially does he stress the moment of Activity in the synthesis. This, by degrees, moves him (in the later edition of his *Psychology*) to denote Will as the central point of the psychical life.

The path of psychological investigation was, however, not the only one along which Wundt was led from natural science to philosophy. As a scientist, he remarked that all knowledge of nature rests upon certain hypotheses. He involuntarily raised the question, therefore, how these hypotheses, our universal grounds of demonstration, are themselves to be grounded. In this way arises epistemology. In "The Physical Atoms, and their Relation to the Causal Principle," a chapter from *A Philosophy of Natural Science* (1866), Wundt debated this question. Here he sought to derive the principles of physics from the law that everything has its ground, combined with the further principle that all natural processes are forms of motion. This latter principle he confirms further through the consideration that motion is the simplest change, since a moving thing only changes its place in relation to other things,

without, on that account, losing a single one of its own qualities. In this Wundt has not yet clarified the epistemological difficulty of this view, which, compared with his later epistemology, displays a somewhat dogmatic character.

In two diverse ways, then, Wundt was led to philosophy; and in his later writings he has further deepened and amplified his conception of philosophy.

The discussion of the problem of knowledge moved him to compose his great work on Logic (*Logic: an Investigation of the Principles of Knowledge and of the Methods of Scientific Inquiry*, 1883). What invests this treatise with its great value is especially the rich material from the special sciences, which is worked into it. Wundt regards science as an historically given fact in the psychical life of man, rather than as a tendency, the possibility and justification of which are to be discovered. This bias is characteristic of Wundt's philosophy as a whole. His logical work possesses, consequently, far more the character of an Encyclopædia than of a discussion of fundamental questions. In form and principle the logical works of Sigwart, Schuppe, and Benno Erdmann are, perhaps, to be preferred; but none of these has such real completeness as Wundt's work.

Wundt's work on Ethics (1886) displays a character analogous to that of his Logic. He regards morality, like science, as a great fact which individuals must acknowledge and prosecute, and he does not admit the difficulty contained in this claim to recognition if its precise grounds be demanded. For Wundt social psychology is the anteroom of ethics. It shows how ethical principles spring from the historically and socially continuous whole within which all mankind

live out their lives. Of the place of ethics in Wundt's general philosophy I will speak later.

Wundt's philosophical masterpiece is his *System of Philosophy* (1889). In this work his skill in presentation at once reaches its highest point. He here provides a definitive notion of philosophy, as Totality and its problems. Intimately connected with this book is his *Introduction to Philosophy* (1901), which, however, as compared with the earlier work, introduces manifold nuances into the conception. In this book the greatest space is taken up with the characterisation of the different tendencies in the history of philosophy.

What leads to philosophy is, with Wundt, an intellectual need, which is constantly standing out more and more, as different from the religious needs, without, however, having to leave the latter entirely out of account. Philosophy signifies a view of the world and of life, which satisfies the claims at once of understanding and of feeling. It is no more reserved to philosophy in modern times, as it was among the Greeks, to satisfy this intellectual need. The individual sciences have developed, and have parted experience among them. They may be divided into three groups: mathematics is the study of space and of motion; natural science is the study of natural processes and of natural objects; mental science is divided into psychology, philology, and history. The distinction between these three groups consists not only in their manifold objects, but also, and most particularly, in the complexity of their established points of view. The development of all these sciences has been powerfully conducive to the growth of intellectual interests. Philosophy cannot, as the speculation of the Romantic school opined, put

them out of the way ; but its task is to bring their themes, the various knowledge obtained through science, into agreement with one another, so that no special point of view attains a one-sided pre-eminence, and so that a harmony between intellectual interests and ethical needs is produced. Historically, according to Wundt, we may follow out the development of our conceptions along a line which leads from ancient philosophy, through the special sciences, and back again to philosophy.

Wundt divides philosophy into epistemology and the theory of principles. To epistemology belong the theory of thought (formal logic) and the theory and history of knowledge (epistemology proper). The theory of principles has a universal part, which Wundt calls metaphysic, concerning which he remarks that it is the conclusion and not the commencement of philosophy. It has also special divisions, namely, the philosophy of nature and that of spirit.

Accordingly, there can be only two philosophical problems, that of Knowing and that of Being. Ethics maintains its place in the theory of principles as a special branch of mental philosophy (flanked by aesthetic and the philosophy of religion), but represents no independent treatment. Yet here one may remark an irresolution on Wundt's part. In his description of philosophical tendencies (in the *Introduction to Philosophy*) he explicitly distinguishes three problems, placing the ethical problem apart from that of epistemology, and from that of metaphysic. The epistemological problem has for its object man as a knowing being, the ethical, man as a willing being, while the metaphysical concerns both sides. This tallies also with his notion

of philosophy as having to bring intellectual interests into co-ordination with ethical needs. Accordingly, this task presupposes the independence of the ethical problem.

Psychology has its place among the special sciences, next to philology and history, and is not counted in philosophy. In Wundt's own psychology, however, it is quite easy to remark a distinction between the special experimental investigations and that psychological standpoint which is of consequence for the philosophy of mind (and especially for its universal part, which must provide a coherent fundamental apprehension of psychical being and genesis). He adds further that psychology holds, on this account, an exceptional position among the individual sciences, that it comes into more direct relation with the theory of knowledge than any other science, since every act of cognition is an empirically given psychical process, which, as such, belongs to the psychological sphere. Hence it follows that it will be allowable to speak of one problem in particular as the psychological; and we can thus apply the fourfold philosophical problem already recognised in order to unify our sketch of Wundt's philosophy.

2. So much for the history of experimental psychology. I now proceed to specify Wundt's importance for the methodology and organisation of this discipline. Here Wundt stands next in reputation to Fechner, the founder of this branch of study. Fechner, however (as Wundt insists in his treatment of him), possessed no specifically psychological interest. He was interested only in those investigations which concern the threshold of consciousness, and accordingly, in his opinion, could

throw light on the relation of the mental and the material. Wundt's psychological interest, on the other hand, is more comprehensive, and for him psychology, as a whole, is important for philosophy in a whole succession of points. In this place I will dwell on three such points: namely, the relation between psychology and physiology, the attributes and the elements of mental life.

A. The relation of psychology to physiology is, of necessity, important for philosophy, since it is decisive in determining the relation between the mental and the material. Outside the *Psychology* and the *System* Wundt has handled this question in the essay to which I have referred, "On the Causality of Mind, and the Principle of Psychophysical Parallelism."

As against Fechner, Wundt does not take psychophysical parallelism as a complete solution of the problem. The complexity of the sciences, he opines, depends far rather on variety of aspects than on variety of objects; and one and the same object can, in consequence, be admitted into very various sciences. Physiology and psychology treat the same object from different points of view. That different points of view are necessary does not, however, prove that distinct independent objects are given. If we follow, step by step, the development of mind from lower to higher stages, we are compelled to the assumption that this succession of stages has been prepared for in unconscious nature, so that Nature appears as a process of psychical self-development. Wundt finally espouses a resolutely idealistic interpretation. Parallelism is, for him, only an ancillary hypothesis, not a definite standpoint. As a provisional hypothesis, it is, however, necessary, because we cannot elude the assumption that there is

homogeneity of cause and effect, so that an influence of the mental on the material, or conversely, would remain a miracle. In this connection, also, he lays stress on the law of the preservation of physical energy, which demands physical equivalents for every increase or diminution of physical energy, thus excluding the ordinary doctrine of interaction.

On manifold occasions Wundt has been constrained to admit that he has continued to cherish this notion, even when his own statements appear to be at variance with it. He explains that, when not concerned with fundamental questions, he is as much justified in his use of the popular mode of expression as a Copernican in speaking of its rising and setting of the sun. It is my belief, however, that the difficulty which is here to be found in Wundt, is not altogether a matter of mode of expression. I mean that in two points he explicitly maintains exceptions to parallelism. In the first place, the connection of the elements of consciousness with one another cannot, he believes, be treated from a physiological standpoint; only the individual elements, and not their connections, have physiological correlates. In the second place, the value which attaches to psychical phenomena has, in his theory, no such correlate. The former limitation of parallelism depends upon an unauthorised application of the distinction between form and matter, between connection and element. The conception of the element signifies only an approach to a mere given, and so it is only possible to distinguish in very rough outline and purely relatively between connection and element. The latter limitation depends on an unwarranted separation between value and that to which it attaches. Feeling something to possess

value is a psychical process like any other. Or, if you will, value is as much a psychical element or a psychical quality as colour or tone, so that it seems inconsequent to make this exception. That Wundt is so resolute in its defence is certainly an effect of his zeal to preserve the independence of psychology. Formerly, he thinks, this independence has been menaced by encroachment, especially from the side of spiritualism. Nowadays materialistic infringements are especially to be feared.¹

It is peculiarly difficult to understand Wundt's theory, in that he takes it for granted that the physical energy in the world is constant, but yet speaks of an increase of energy on the mental side. From the chief passages of this part of his theory it can, nevertheless, be seen that he comprehends, under the increase of psychical energy, partly the origination of new psychical qualities, and partly the accretion of fresh values.² It appears to me to be more correct to speak here of a concentration and organisation of energy rather than of an increase. Psychical value presupposes concentration, but not growth of energy in general. On the other hand, the principle of the conservation of psychical energy is rendered necessary if the morbid states which arise from the one-sidedness and disparity of consciousness are to be made intelligible.

B. Thus, according to Wundt, attributes stand out in all gradations and expressions of the spiritual life which cause it to appear as opposed to the life of material nature, although the latter is its external, sensuously perceptible, aspect. In his various compositions Wundt enumerates these peculiarities somewhat differently. The most important traits, however, are the three discussed in the sequel.

(i.) Every psychical content is a process, an effect, in unremitting reciprocal action with other processes and determined by anterior processes. The soul is neither Thing nor Substance, but Vitality, Activity. This conception of the soul Wundt calls the actual, as against the substantial, which both spiritualism and materialism maintain, each in its own way.³ The soul's existence is manifested through the coherence of all psychical happenings. This renders it impossible to treat the soul on the analogy of the material atom, a thing which spiritualism is especially prone to do. At whatever point we bring the soul-life under observation, we always find continuity, if we only look for it. The assumption is thus justified that continuity is valid, over and above the region in which psychological observation is possible, the Unconscious being used as an ancillary concept.

(ii.) Another peculiarity of psychical life is its capacity of producing a qualitatively new content through a composition of given elements. This may be designated "creative synthesis." It finds expression in every sense-perception, and most clearly in the apprehension of space, which springs from the mutual reaction of perceptual, tactual, and motor experience, and in the timbre of sounds, which is produced by the intermingling of overtones and undertones. It was first discovered in the higher phases of psychical life, in the rise of imagery, concepts, and ideas. But the peculiarity presents itself in the most elementary psychical processes, as well as in the highest. In this respect also it bears witness to the continuity of the soul-life.

In "creative synthesis" Wundt lays particular

stress on the word "creative." He does not, as we have already said, insist upon the problem and the limits of comprehension herein latent. For the qualitatively new fact that supervenes, *e.g.* when, according to the genetic theory, the spatial form arises out of the synthesis of disparate kinds of experience, or when an inspired idea springs from motives which it brings into entirely new connections, is not to be explained as the work of a creative synthesis. This expression may rightly be used for descriptive purposes, and is well adapted for emphasising the new element in the product as distinct from the factors; but it evades a great problem, and must not, consequently, be employed as if it settled the matter once for all.

(iii.) A third characteristic of psychical life connects very closely with those just mentioned. Nowhere, according to Wundt, does psychical activity express itself more clearly than in the manner of analysing a phenomenon into its particular components, through a process which may be denominated "relative analysis." This analysis does not always divide so as to present the parts as self-subsistent units; but always so that they preserve their relation to the whole, and, just because of their position therein, possess a significance of their own. As an explanatory example, Wundt cites the way in which we can stress a particular point in the field of vision, by making the corresponding stimulus fall on the spot of clearest vision of the retina. The selective attention revealed in relative analysis Wundt calls *Apperception*. By means of it the parts of a whole appear to us gradually, without losing their coherence with the whole. Thus the thought is a totality for the orator, before its separate parts have

been articulated, and to the artist his work appears in its completeness before he has distinguished and executed its individual fragments. By this means are attained progressive clarity and distinctness.

C. Wundt's attention was first directed to the active side of conscious life through his examination of sense-perception. These investigations led him to the concept of Apperception, to which I have given a passing reference—one of the most difficult conceptions of Wundt's philosophy.

The apperceptive activity is expressed, not only in the field of ideas, but also in all feeling, since appetite and aversion are determined by the relation of the ideas to psychical activity, and it is expressed in what is called, in the narrower sense, Will. Wundt cites as an example the distinction between the field of vision and the fixation-point. Moreover, it is to be noted that for him apperception not only distinguishes (*e.g.* in fixating a special point in a connected whole), but it also unifies, as in all conception and judgment. It stands opposed to the preponderating passive and involuntary processes, *e.g.* to the mere association of ideas. Wundt combats that psychological theory which would reduce everything in consciousness to the association of ideas, known as the association psychology. He maintains that there is in every association an "apperception," so that the separation of the two is really based on an abstraction, to which reality may more or less approximate. But it is not an easy matter to reconcile all Wundt's statements with this. He speaks of simple association processes in which the will has no influence whatsoever: the complete lack of voluntary influence on their mode of origination may be

taken as a mark of such. When he further assumes a cerebral "centre" of apperception, he would seem to imply that apperception, as against association and other more passive movements, must be an independent process.⁴

The cases which point the distinction of passive and active apperception will be found to be still more involved. The mark of active apperception is that it is determined by a precedent idea, and is capable of more than a single possibility, while passive apperception is determined by a sense-impression, and follows a single prescribed tendency.

I have been unable to convince myself of the necessity of introducing this concept into psychology. The concept of attention includes, in fact, all that experience offers. As involuntary attention (corresponding, in general terms, to Wundt's passive apperception) it co-operates with every sense-perception (*e.g.* in fixating a particular point in the field of vision), as also it does in every association of ideas (for it always depends upon the dominant feeling and interest which idea will be evoked). As voluntary attention (thus generally corresponding to Wundt's active apperception) it presents itself when the act of attention is preceded by an expectation or an effort to understand or imagine a certain definite thing. The task of psychology, then, is to investigate all special grades and forms of attention from the most elementary up to the very highest.

The real point of Wundt's apperception theory consists in the emphasis which it accords to the significance of the inner central conditions of psychical activity, as distinct from the outer and peripheral conditions. In particular Wundt insists that the entire course of

previous conscious development determines the way in which we spontaneously fashion and take up sense-impressions and ideas. I prefer to put it thus: The grade and direction of attention are determined at any given stage of evolution by the needs and stress of life; and these needs and this stress are further determined by the precedent life-history.

The difficulties of Wundt's apperception theory are, in all probability, connected with the circumstance that he worked out the concept, partly experimentally, especially through investigations dealing with deliberate and spontaneous attention, and partly also following historical types (chiefly Leibnitz and Kant), with whom the doctrine is based on explicitly conscious functions. Thus, the relation of clear consciousness to semi-consciousness, of the voluntary to the spontaneous functions of psychical life, became involved in a certain haziness; even after Wundt has so amplified the apperception concept as to make it pass for the entire psychical life. The concept was originally not so modified as its greater compass required. It is Wundt's aim, as is clear from successive published utterances, to give a prominent place to the psychological concept of activity, as the expression of one of the ultimate working and endeavours of the inner life. The concept of will appears to him more and more as a typic, a central concept, with which every other concept of psychical life must be cogitated as analogous. In the second edition of his *Logic*, he describes his psychological standpoint as *Voluntarism*, an expression which he borrows from Friedrich Paulsen, who puts it forward as against the intellectualism of the older psychology.⁵ Yet Wundt's psychology, even in its latest form

in the *Outlines*, the third edition of the *Human and Animal Mentality*, and the fifth edition of the *Physiological Psychology*), is not presented as a psychology of will. It does not follow will in its development from stage to stage, viewing the other conscious elements in relation to it. Such investigations, inquiries of no small interest, have been set on foot by Freidrich Jodl, Alfred Fouillée, and G. F. Stout. Nay, Wundt does not even reckon will among the elements of consciousness. He treats the phenomena of will as the most composite and special forms of conscious life, and numbers only sensations and feelings among the psychic elements. This is comprehensible only in view of the fact that Wundt began his psychological studies with sense-perception and the allied intellectual functions, and thence worked his way up, thus allowing the significance of the principle of psychical activity, without giving it so prominent a position as to determine all the rest. The relation between elementary and composite psychical phenomena remains, with him, in continual haze.⁶

The difficulties which Wundt's psychological work offers to the student attest the continuity of his many years of unbroken, unwearying labour, from the moment when he deserted natural science to enter the domains of philosophy. Thus, in virtue of the catholicity and fulness of his knowledge, he has shed light upon a medley of phenomena, which a more direct and sharply limited treatment would not have been able to do.

3. With regard to Wundt's treatment of Epistemology, I will, in this place, dwell more especially upon his *System of Philosophy*, in which, as it seems to me, his decisive attitude stands out most clearly and amply.

(a) The most important thought-processes are

present in popular knowledge even before it has assumed scientific form. Knowledge is partly descriptive, partly narrative; it sets out partly to specify attributes, partly to ascertain events. Description corresponds, in strict thought, to the proof of identity, narrative to the exposition of a logical relation of dependence. In the one the constant or static is prominent, in the other the variable or dynamic. The logical relation of dependence is more clearly expressed in the inference in which a principle is derived from other principles. On this account thought seeks to reduce all spatial and temporal relations to relations of logical dependence, of the same kind as the conclusion bears to the premisses in an inference. We do not rest content with a mere immutability of attributes, but we vary these so as to discover their mutual dependencies. This is a natural endeavour, for logical dependence is the only sort that agrees immediately with the peculiar regularity of thought. Dependence is here nothing external; the freedom and necessity of thought are immediately one. Consequently, we seek to reduce all real relations of dependence to logical. This endeavour finds expression in the principle that everything has its ground (the Principle of Sufficient Reason); which principle brings our manifold acts of thought into the most intimate relation.

Knowledge in every case begins with the conviction of the real validity of ideas—as a *naïve realism*. There is not even a distinction between knowledge and its objects; such a distinction presupposes a later stage of reflection.

Philosophers often overlook the fact that reflection always comes later, and does not belong to a primitive

stage. We must have sufficient grounds for rejecting the reality of the immediately given. Such grounds arise especially out of the antithesis of variable and constant. That alone can possess validity which continues in existence in spite of all change; and this is discoverable only by thought not by immediate apprehension. When thought-activity frames objective concepts, capable of replacing the mutable content of immediate apprehension, naïve realism passes over gradually into *critical realism*. This is no more than the continuation of the process already begun in naïve realism of distinguishing between perception, memory, and imagination. On the relation of naïve to critical realism, Wundt has written an excellent paper, which you may find in volumes xii.-xiii. of *Philosophische Studien*.||

Three stages are to be distinguished in the passage from naïve to critical realism—the stage of Perception, that of Understanding, and that of Reason. These three stages correspond roughly to the standpoints of the practical life, of the special sciences, and of philosophy.

(b) In perception, Time and Space stand out as the two forms of the disposition of the given—the constant as against the variable qualities—and as the expression of a continuous thought-activity. The laws of Space and Time can be fixated according to concepts, and hence thought is naturally prone to keep to them, and to treat qualities as a something subjective as compared with them.

Knowledge by way of understanding begins with a strong movement away from the constant persistence of immediate apprehension, and a substitution for it of

words and symbols. The object is now that only which may be determined conceptually. This brings us necessarily into the field of hypothesis ; but under a logical compulsion, for thought is at pains to discover an incontestable coherence among all the parts of the empirical series. Here everything goes back to the laws of thought. But at no point have we pure thought any more than we have pure experience. Hence, apriorism and empiricism are alike rejected. The knowledge of understanding has its place in mathematical and natural science, just as it has in psychology. The scientific conception of matter or of material substance affords a good example. This concept is produced by the reduction of all material attributes to spatial relations, to motion and place ; and the reduction is motived by the fact that in no other way is it possible to make a simple and regular inference from one material variation to another. The empirical qualities have, in natural science, only an ancillary use, in the *a posteriori* deduction of the spatial and temporal relations of the object. It is not the task of a theory of matter to develop ideas conformable to the phenomena of empirical bodies, and certainly not to frame intuitive ideas in general ; but, on the other hand, to ascertain conceptions by means of which empirical phenomena may be derived from phenomena previously given. What is valid for the conception of matter is valid also for such conceptions as inertia and energy. Incontestable connection, in agreement with the Principle of Sufficient Reason, is the eternal background for the production of these concepts. In the psychological sphere, says Wundt, there is no ground for undertaking a construction of concepts analogous to those which,

in natural science, lead to the conception of matter. Observation in this region clearly demonstrates that the most constant thing in us is our will, and that this is a never-resting activity, an incessant happening. It follows, therefore, that there is neither the possibility nor the ground of producing a concept corresponding to spatial position in the mode of operation of material phenomena (cf. *supra*, on the conception of the "psychic actual"). The constructions and hypotheses for which we have a use in the psychological sphere concern, partly the reciprocal relations of psychical elements interacting in inner processes, partly the relation of the psychical to the material. Although natural science reduces all change to change of place and motion, yet it does not dispute the possession by things in the world of inner qualities which are not indicated by their external relations. But the discussion of these is not its business. Without such inner qualities it would, however, be impossible to understand the origin of life, and especially of conscious life. Whenever a succession of events appears as a totality, in which each component takes its proper place, so as to work out a decisive result, it is allowable to apply the concept of the end, even though the end is not thought as existent in idea, before it becomes actual. The way in which the individual component appears as determined by its relation to the whole, authorises the teleological point of view, without in any way concluding to a pure mechanism. Only on such a view can Wundt allow himself to attribute significance to the concept of development outside the organic field.

Rational knowledge transcends experience in as much as it seeks an unconditional coherence, whereas

in experience all connection is conditional. The word "reason" Wundt takes in the strict sense as the tendency towards unity, which moves to the production of a totality from parts given piece-meal. Reason arises with the awakening of the consciousness that thought-activity, in accordance with its own particular laws, is always going further afield, since every limit of reasoning must be thought either as exceeded or as able to be exceeded. The idea arises of a totality of all relations of dependence. The ideas of reason follow from a continuation of the process that leads understanding to form its concepts. While understanding only sought an incontestable comprehension of the given, reason seeks—according to the same laws of thought as govern the understanding—to produce a coherent system.

This task accordingly appeals to Wundt with all the force of a thought-necessity. In vain do empiricism and scepticism dispute the existence of the present problem. Wundt admits that he is not in a position to adduce a logical demonstration in refutation of empiricism and scepticism. But it is his opinion that they are capable of refutation through the very existence of thought, since it is self-contradictory to apply thought to the mutual connection of particulars, and then to refuse the task of bringing the connections thus obtained into reciprocal coherence. The Principle of Sufficient Reason goes yet further. The scientific significance of empiricism and scepticism depends on the fact that they keep speculation within certain limits, and look to it that it causes no trouble through mixture with intellectual knowledge.

Rational knowledge can, for Wundt, pass beyond

experience, or be "transcendent," in two ways. It can follow out in the same direction the production of series begun in experience. So in the numerical series, in the dimensions of space, in the time series, in Spinoza's two attributes (Spirit and Matter). Here we think in an uninterrupted continuity what is given in experience only in fragments. This passage beyond experience Wundt calls *real transcendence*. Rational knowledge can also complete experience being concerned with other series than those which enter into experience. While in real transcendence, quantitative infinity only is in question, here a qualitative infinity is introduced, more and other aspects or attributes of existence being adduced, than enter into the given. An example from the history of philosophy is presented by Spinoza's assumption that Being possesses a boundless number of attributes besides the two which experience makes known to us. This type of passing beyond experience Wundt calls *imaginary transcendence*, because it concerns new qualitative series in Being, just as the imaginary numbers may be interpreted as the expression of new tendencies, as against the tendency denoted by the series of positive and negative real numbers—lateral unities, as a distinguished mathematician has dubbed them. The formation of hypotheses of this sort is justified, if it satisfies the reason's need of unity, and does not infringe empirical science.

Only in this way, according to Wundt, can a general world-philosophy be attained. All metaphysic that has any meaning is derivable either from the continuation or the amplification of empirical knowledge. In these two ways we are led from the problem of Knowledge to that of Being.

4. (*a*) Metaphysic really has its beginnings in the special sciences ; in so far, that is to say, as they provide definitive principles or hypotheses, the content of which cannot be proved empirically, although they are indispensable for the connection of experience. Perhaps they are by no means fully capable of being constructed on the analogy of the given objects of experience.

They make experience intelligible but are themselves beyond experience. This is the case *e.g.* with the scientific hypothesis of the constitution and fundamental qualities of matter. Wundt carefully retains the name metaphysic for such assumptions, so that they may not be confounded with actualities. Every definitive hypothesis is metaphysical, and all metaphysic is hypothetical.

Metaphysic is motivated by the need of coherence, and, consequently, the need of understanding the empirical content ; the need, ultimately, of a consistent world-philosophy. Every individual region of experience, and, consequently, every particular science, has a certain tendency to regard itself as absolute, as a key to existence as a whole. Here, therefore, a continuous critique is necessary.⁷

In this Wundt's relation to the Positive, the Critical, and the Romantic schools comes out characteristically. He approaches Positivism in the emphasis which he lays on experience as a criterion. With great caution he advances, step by step, to the ultimate questions of knowledge ; and the manner in which he acknowledges both the problems upon which he enters at this point, and the character and difficulty of their solution, exhibits him as an adherent or as a continuator of the Critical philosophy. But he is ruled by caution only so long as he considers himself to be nearing the boundary line.

When he stands upon the frontier itself, or believes that he is standing there, he is not so wary, and does not always think out the ultimate consequences of his conclusions. Here he is often cumbrous and dogmatic. The principle of unity overpowers him, and critical reflection recedes. There is no sign of the surf which, naturally, breaks upon the shore of thought. On this point the English philosopher, F. H. Bradley, with whom we will occupy ourselves later, gives us better instruction. In this connection he is more comprehensive than Wundt, though he lacks Wundt's broad empirical and experimental basis. Hitherto, however, we have learned to know Wundt's essentially empirical and critical aspects. The treatment of his metaphysical attitude will bring out the Romantic aspect of his philosophy.

(b) There are, as the history of metaphysic shows, three groups of ideas, *i.e.* of concepts, which, through real or imaginary transcendence, bring about a conclusion for world-philosophy. Wundt calls them the Cosmological, the Psychological, and the Ontological Ideas.

(i.) The idea of the physical world as a whole arises so much the more naturally in science as its determinate laws can only be proved in their complete totality. Every investigation presupposes a certain isolation of the matter to be investigated. This is thinkable so long as there is no external influence. Step by step the view may then perhaps be widened. This is valid not only when it is a question of the physical world as a whole, but also when we are treating of the smallest part of the physical world. We may think time and space as extended beyond experience, by dint of sheer

continuance; this is a matter of real transcendence alone. But every hypothesis of the physical world, as a whole, or of its smallest part, is of imaginary transcendence. When a frontier is attained, the possibility becomes evident of something qualitatively new being valid beyond it. Such hypotheses are, however, justified if they are not at variance with empirical knowledge.⁸

If metaphysic be erected upon the foundation of the cosmological ideas only—upon such concepts as space, time, matter, mechanism—it is in the nature of a materialism.

(ii.) Wundt observes that in nearly all contests on metaphysical territory the point at issue is the psychological idea. We already know Wundt's attitude towards the psychological problem, in so far as it is based on experience. Activity and the effort after unity are for him the marks of conscious life, and the concept of a soul-substance contains for him, even when it is spiritually motived, a furtive materialism. At the same time, we may here add, this conception is, for him, far too individualistic, in that it isolates individual psychical existences. The distinction between soul and body exists only in our apprehension. Experience presents a spiritual organism which in and for itself is coincident with a bodily organism. But here experience leads to no conclusive concept, and, consequently, every concept of the soul, actual as well as substantial, is, in the end, an imaginary transcendent. But if we are desirous of bringing our ideas on this question to the issue, we must not forget that a spiritual individual enters into our experience as a member of a society, and that in virtue of this alone do its motives, its tendencies, its content, become intelligible. Wundt con-

sequently lays great store by social psychology. Now at last emerges the highest psychological idea, the thought of a comprehensive ground of unity, of a "super-spiritual," which is the basis of all psychical existence, and of its coherence. This idea is an imaginary transcendent, for we can apply psychological determinations only to individuals; wherefore we lack in our experience an expression for the totality of all ideation and will.

If metaphysic be grounded on the psychological ideas alone it smacks strongly of idealism.

(iii.) If we are not desirous of taking up the more or less one-sided lines of materialism or idealism, and if we endeavour, on the contrary, after a more comprehensive conception of Existence, we must, according to Wundt, combine the cosmological and the psychological ideas. Thus we come to what he calls the ontological idea.

This combination may be such that psychological analysis can be the counterpart of cosmological. Cosmological inquiry shows us reality as a coherence of elements, concerning whose ultimate nature nothing definite can be said. Psychological investigation has at least set forth will as the ultimately real in us. If we combine both we have the idea of reality as a totality of striving and willing existence.

We cannot, according to Wundt, rest content with the idea of a Being (like Spinoza's) whose constitution is not more intimately determined. It must always be asked whether the principle of the unity of reality agrees with all our given concepts—whether it lies nearer to the material or to the spiritual. The world must be cogitated either as material or else as spiritual unity. We can no other. Wundt's choice is not

doubtful. The only activity immediately given is, and remains for us, our will. An infinite corporate will is thus the ultimate conclusive idea. This idea, the idea of God, is an imaginary transcendent, and its content is incapable of determination. By its help it is, however, possible to conceive of the cosmic mechanism as the outer veil of spiritual operations and endeavours; and our own psychophysical being appears as a world in little, a microcosm. Thus does the reason's need of unity find its satisfaction; and we can at the same time regard our human ideals as a series springing from the very foundations of the world. The empty and comfortless philosophy which, resting on understanding alone, sees the being of things exhausted in their eternal relations and order, is rejected.

(c) The definitive position which Wundt takes up with regard to ultimate questions occasions quite naturally some critical remarks, partly on his method, partly on the motive of the standpoint which he adopts.

With respect to method, he thinks that he is undertaking just such a continuation and completion of empirical thought as the need for unity demands. On the other hand, he expressly rejects the possibility of relying on analogies in this connection; no analogy is sufficient! But when he has to substantiate the idealistic turn which he gives to his philosophy, he nevertheless resolutely pins his faith on the analogy of the microcosm and the macrocosm. He asks with which of our given conceptions the principle of the unity of reality is in the closest agreement. Here there can be only two possibilities: "The world must be cogitated either as a material or as a spiritual unity, in so far as it is to be a unity at all. There is no third

way" (*System*, p. 411, 1st ed.). On this I remark: It is right that we can only know spiritual and material phenomena from our experience; but (as Spinoza saw) we have no right, on this account, to assume that reality is thus exhausted and that there is no third alternative. Wundt appears at this point to forget his own theory of the imaginary transcendent, which points to the possibility that reality may be more complex than the metaphysicians imagine. In any case it is certain that he relies on an analogy, and that he believes his choice to have been made from the only two possible analogies. What he does decide by the choice is the consideration as to which of the two kinds of phenomena we know immediately (cf. *System*, p. 434, "Like what we experience within ourselves," 1st ed.). His train of thought clearly reminds us of Leibnitz and Lotze, save that they placed reliance on analogy with full consciousness of what they were doing. But there is no satisfactory treatment of the authority of analogy in thought, and the various applications of it which are known to science.⁹

With regard to motive, it is clear that Wundt's concluding thoughts do not proceed from a theoretical need only. He declares that the view to which we come, if we do not follow the path he treads, is "empty and comfortless." Regarded from a purely empirical standpoint, we stand, with our ethical ideals, be these valuable and even indispensable as they may, on the brink of an abyss over which there is no bridge.

In all this we feel the lack of a series of psychological and ethical investigations for the further elucidation of the need, on account of which the ontological idea of unity has to be taken as practically necessary and

justified. In the first edition of Wundt's *System*, it was a prominent principle that philosophy cannot make belief into knowledge, but can prove the necessity of belief. This principle retreated in the second edition, perhaps because Wundt saw that the psychological necessity of belief is incapable of proof. Moreover there is here no discussion of the difficulty which this monism, as a monism based on ethical motives, has to fight against from the disharmony presented by experience.¹⁰

When we come to the conclusion of Wundt's handling of the ethical problem, we will return to some of the points here mentioned.

5. I touched earlier on the somewhat nebulous situation of the *ethical problem* in Wundt's philosophy. This is partly explicable by the character of Wundt's ethics, which is apt to associate itself with social psychology. Partly it discharges itself in a metaphysical or religious treatment.

(a) Social psychology is, for Wundt, the anteroom of ethics. He has begun a great, a vastly important work, on the leading points of social psychology—speech, myth, custom. Up to the present (1902) the first part only has appeared, and a coherent description of Wundt's social psychology cannot, therefore, be given. His leading thought, however, is this: that the individual consciousness stands in a necessary connection with the life of the people, and even of mankind at large, through speech, religion, social habit, and custom. The individual will sees itself an element in a universal will, by which it is determined in respect both of the motives which guide it and the end toward which it strives. Culture and history evince a life truly social, and are

not merely the resultants of the coming together of disparate individual units of activity. Individualism, the bane of the whole modern period, is very wide of the mark in treating the individual will as the one reality. There is no such thing as primitive, isolated, individual man. Individualisation emerges gradually from a condition of social unity, without completely breaking up the universal will.

The existence of human society is the weightiest of all historical facts. It dominates the individual even when he believes himself to be most surely free of it. Through it, sympathy and piety, the grounds of social feeling, are determined. The great, the progressive, spirits of mankind have the greatest share in the universal soul. They are able to be so nourished by the universal soul that they can point beyond it to new tasks and new tendencies.

It would be Gothamism to make the value of human history depend upon the degree to which the welfare of individuals or of particular groups has been promoted. Individuals and peoples are transitory: they are subject to passion, prejudice, and weakness. But the spirit of history is everlasting, and is always in the right. Historical development obeys laws which the lone individual or the particular people, standing in the midst of the path of evolution, cannot overlook. The highest importance attaches to the fact that human action always extends more or less beyond the conscious motive and end of the individual. Herein is expressed a metamorphosis of ends (Wundt calls it Heterogony of Ends), which renders possible new subjective motives, unforeseen effects giving rise to new feelings and traits. The production of new motives from given effects is the

most important law of development that is valid for the ethical consciousness.¹¹ It brings it about that we cannot be conscious of the highest ends of our development. The most we can do is to conjecture the direction in which they lie. The conviction that all stages are subservient to an unremitting progressive development, can, in the last appeal, be the object of belief only, not of knowledge.

Wundt does not render sufficiently prominent the difficulty here consequent upon a scientific ethics. Yet it seems clear that the possibility of new production must render all ethics more empirical than Wundt, with his appeal to the spirit of history, will admit. Here, again, we find that he recalls the Romantic philosophy. He is frank also in the admission that his ethics approaches speculative idealism in some of its leading thoughts. Hegel had already recognised the real moral import of the will-totality. According to Wundt, Hegel committed the fault of treating only the universal will as an objective moral force, and making the individual will, on the other hand, merely its unconscious supporter and executor. In his treatment of the relation of the individual to society, Wundt seeks to remedy this one-sidedness.

(b) The individual is supported by society, but reacts upon it through the tendency of his own thought and volition. Individual consciousness is creative; social consciousness is retentive. The new is derived from individuals, but society makes it serviceable for later development and thus subserves the continuation of spiritual life. All are not productive in equal measure. Only the progressive spirits have a decisive influence in determining the tendency of the universal will, and this

is in the highest degree valid of such an ethical genius as arises once only in a hundred, or, maybe, a thousand years : one who leads to fresh ethical advances, calling into life traits hitherto dormant.

Transferring productivity, in this way, to the individual (as against Hegel), Wundt entangles himself in a contradiction with his own strong emphasis on the "universal will." He ought, consequently, to attach far more weight than he has done to Individualism, seeing that the development of powerful individualities is to be a principal ethical goal. In this connection he could learn much from the English school, which he looks down upon because of its empiricism. In consequence he would have to assign a higher place to the single individual, not only as starting-point but also as finishing-point, as end, than this passage would seem to allow : "No matter how richly endowed the individual may be with fortune or parts, he is but a drop in the ocean of life. What can his happiness or misery signify to the World ?" I cannot answer this question. But I am by no means convinced that any meaning attaches to words like "end" or "value" if they are not all explained in relation to the conditions of life, with which beings capable of feeling pleasure and pain are bound up. Wundt's ethics ends with a mystical dualism : the end lies in the "universal will," the means in the "individual will." He has not space in his ethics for the tragic conflicts which may arise from the collision of the individual will with a historically formed universal will.¹²

Characteristic of this aspect of Wundt's ethics is the principle that Justice is not an individual but a public virtue, because it presupposes the power to determine right and prescribe duty. He overlooks (perhaps under

the influence of German bureaucracy) the fact that every individual possesses power, in virtue of his position in the family, society, the State, to practise justice in his convictions, in his judgment of others, and in his dealings with them. Even the slave has this in relation to his master. The notion of power has blinded the philosopher to many independent sources of judgment and action.

And yet several passages show that Wundt has an eye for the evils of the present social order. He censures the fact that the thief receives sterner punishment than the spendthrift, the usurer than the gambler. He finds that the existing relation between property and labour produces two contrasting inducements to immorality. Wealth without occupation occasions pleasure seeking; poverty without occupation engenders envy. These evils can only be remedied by a new order of law. Society to-day, in the midst of the protests of an obsolete idea of right, tolerates new elements of culture, which cannot be classified under the old conceptions.

(c) Wundt advocates the independence of ethics as against speculation and metaphysic precisely on the ground that it renders an important contribution to the foundations of philosophy in general. As we have seen, his ethics finishes by passing over into speculation or belief. Nay, for Wundt, ethics is in greater need than any other department of a metaphysical completion. Owing to this notion (which is contradictory to the independence of ethics from metaphysic) ethics, with Wundt, passes over into philosophy of religion. When ideals transcend that which is attainable by human effort, they assume a religious character. Here, philosophy can only give indefinite hints; the positive

religions, on the other hand, give concrete symbols. The leading thought of religion is the claim of all spiritual creations to possess absolute or imperishable value. The higher religion rises above the standpoint of nature-worship, the more closely does it agree with science. A wonder-working God is a God of nature ; he is not the God of ethical religion. The development of Christianity has not escaped a relapse into nature-worship. The final task of Christianity must be—according to the assertion of its Founder—the conquest of all such elements of religious faith as hinder the ethical content of the religious idea. Christ will always appear, especially if taken, not as God, but as man, an ethical standard, and at the same time a witness of the eternal and inscrutable ground and goal of the world, coalescent with the ethical ideal.

Wundt's philosophy, as I have just endeavoured to outline it, may be pointed out as typical of contemporary thought. The point where it is in need of corrective appears even in the attitude which it implies and the methods which are used to work it out. This is especially the case where he sets out to "complete" empirical science with metaphysical and religious elements. Though he vigorously endeavours both to grasp and to carry through a purely objective attitude, yet subjective factors make themselves felt which demand a more intimate investigation. Wundt's objectivism, which in certain points borders on the mystical, is not only his champion but also his gaoler.

II

ROBERTO ARDIGÒ

1. IN my *History of Modern Philosophy*, only the age of the Renaissance gave me an opportunity of mentioning Italian philosophy. Only in this period did Italian thought exhibit such originality and boldness as could invest it with importance for the development of philosophy at large. The spirit which in ancient times had infused the Pythagoreans and the Eleatics, and had inspired Lucretius with his great didactic poem, revived in Pomponazzi and Telesio, in Bruno and Galileo. But after Bruno's death at the stake, and Galileo's enforced recantation, the Italian Renaissance movement was thrown to the ground. During the centuries which follow, we have only isolated names of philosophical interest; e.g. Giambattista Vico († 1744), the precursor of modern sociology. Towards the end of the eighteenth century French philosophy had great influence. A body of enthusiastic scholars collected around the psychologist and sociologist Romagnosi († 1835). In the middle of the nineteenth century, however, philosophical activity took on another character; religious, patriotic, and philosophical enthusiasm having concluded an ultimate alliance. The struggle for Italian unity and

freedom impressed itself strongly upon a number of young ecclesiastics who dreamed of a great harmony of religion and thought, of Church and State, and who believed that the Church would take the lead in elevating the nation. As in the time of the Renaissance Machiavelli's political philosophy loomed out of the background of enthusiasm for Italian freedom, so now the speculations of Rosmini († 1855) and Gioberti († 1852) were infused by it. Their philosophy was a sort of Platonism, deduced from the belief in an eternal truth, which rises superior to all experience. Philosophy was for them partly an introduction to Religion, a sort of doctrine of the Logos, partly an instrument of patriotism. The distinction between the two modern Platonists depends more especially upon the fact that Gioberti assumes an immediate apprehension of ideal truth, whereas Rosmini—rather like Schelling, in his later doctrine—maintains that thought leads only to a system of possibilities: so far, he approaches more nearly to the Critical philosophy. Mamiani († 1885) developed Italian idealism in a way which allowed greater influence to experience, and in this intermediate form it prevailed for a time at the Italian Universities.

The part played by the positivist tendency in Italy during the last generation is a typical expression of the rhythmic movement which appears so often in the development of philosophical ideas. Many causes were operative in this change of philosophical interests. Italy had attained her unity and freedom, so that there was room for specifically scientific interests. Ideal enthusiasm could be succeeded by real work. At the same time a powerful influence arose from the side of modern French and English philosophy, through the

writings of Comte and Mill. Villari applied the principles of Positivism to the conception of history. Angiulli turned them to account in the sphere of psychology and pedagogy. In addition the influence of modern natural science came to bear. On the other side, the Catholic Church took up a more and more decided position as against all philosophy that did not keep punctiliously to the rut of mediaeval thought. Rosmini's and Gioberti's scholars among the clergy were persecuted. It was even said that the task of the present time was to bring back civilisation to the Catholic notions from which it had wandered during the last three centuries! In 1864 Pope Pius IX. issued a "Syllabus," an inventory of the errors of the time, among which are enumerated freedom of knowledge, naturalism, and rationalism, and particularly the view that the methods and principles of scholastic theology should be incompatible with present-day claims and the results of science. Pope Leo XIII. explained in an *Enciclica* (1879) that the philosophy of Thomas Aquinas was a divine remedy, and that all teachers must use it to refute modern errors. Later, in a circular to the French Bishops (1899), he emphatically condemned the Critical philosophy.¹³

Not only had the motives of the intellectual harmony which the Italian philosophers in the middle of the century hoped and strove to attain, ceased to be active, but also the opposition between the Church and Science had become accentuated, partly on account of the development of thought, partly on account of the ecclesiastical attempt to set back the time.

Under these circumstances Roberto Ardigò developed, in the tranquillity of the cloister, from a Catholic of child-

like faith and patriotic enthusiasm, into an energetic Positivist. His development and his standpoint not only have interest as symptomatic of the time, but they are of significance as a contribution to philosophy, on account both of his power of thought and his psychological talent; because, too, of the peculiar change which Positivism underwent at his hand.

2. Ardigò was born near Cremona in the year 1828. His father, a well-to-do farmer, went to Mantua so that his son might prosecute his studies. His mother, whom Ardigò often mentions with hearty gratitude in his writings, was a pious Catholic. Thanks to her influence he became a priest. After the death of his parents Bishop Martini took him up and made him Prebendary of Mantua Cathedral. In his seclusion he was a zealous student of scholastic philosophy and modern science, firmly convinced that the "modern errors" were to be refuted. Slowly an entirely new fabric of thought grew up in him—more perceptibly to his associates than to himself, and finally it dawned upon him, at a definite moment, that he no longer espoused the dualistic teaching of the Church, but believed in a great continuity of things. In one of his writings (*La Morale dei Positivisti*, ii. 3. 2) in a chapter treating of the possibility of morals without religion, he makes some interesting remarks on the subject of this rupture.

"Through the example and teaching of my mother, a simple and poor woman of the people, religious beliefs and the religious life were originated and fostered in my soul. Even at the present day I cannot think of the sublime simplicity of my mother's religious feeling without the greatest enthusiasm and the tenderest

sentiments being evoked in me. A true picture of this feeling is even now displayed by my sister, who owes her education neither to the school nor to cultivated society ; and the way in which it comes out in her makes me feel the greatest reverence as for something holy. Later on this early religious bent of mine was in great measure strengthened by my living with Mgr. Martini for a period of more than twenty years. He had taken me up after the death of my parents. He gave me food, which I lacked, and made possible for me a scientific career. . . . He who looked upon science and frank opinion as the basis and soul of religion, took to me because he saw my zeal for study and found in me a character without deceit. He hoped that I would one day serve the Church against the ignorant, superstitious, bigoted, and hypocritical sort of religion which he abominated. . . . I dedicated myself heart and soul to theology—as well as to the study of natural science and of philosophy, to which I have been ever true—especially to the dogmatic and apologetic. I collected for myself a library of the Old Fathers and the theologians, devoting the best of my young years to their study, especially that of St. Thomas. At length I wrote and published a book on Confession, directed against the Protestants. But the outcome of my study was wholly contrary to its aspiration and expectation. Gradually it came to a point at which the doubt, which had already presented itself to me from all sides in my earlier years, against which I had struggled with unceasing reflection and study, and which I had long regarded as conquered, cropped up unopposed. And, one fine day, to my immense astonishment, it stepped forward as a definite conviction and an incontestable certainty. Marvellous !

Up to that day I had devoted myself to the effort to remain firm in my old religious beliefs, and yet, within me, and without my knowing it, the Positivist system had become freely developed in the midst of the system of religious ideas which was the fruit of an effort so great and so protracted. The new system, I found to my very great amazement, already complete, and unshakably settled in my mind. At that moment I had observed as I sat on a stone under a shrub in the garden which I had laid out near my canonical residence, how my last reflections had snapped the last thread that still held me bound to belief. Now it suddenly came to me, as though I had never in my life believed and had never done otherwise than study, to develop the purely scientific tendency in myself. This arose, as I believe, out of the zeal with which I had sought to experience as far as possible all the conflicting grounds of religion, to be able to believe on good security, and to defend my belief against all attacks."

Ardigò adds that the step which he now undertook was painful and distressing, thinking as he was of his mother and of his relation to his benefactor. But his will was steeled in this battle, after which religion seemed to him a poetical reminiscence. And he experienced no weakening of moral ideality; on the contrary, from now on, it is even more absolute a conviction with him that the only true goods are those that we attain in useful activity, following the laws of knowledge, and devoting ourselves to the work of thought.

There came now to Ardigò some difficult years. He had to keep himself by teaching, and only after the lapse of many years did a Liberal Minister of Education appoint him to the Chair of Philosophy at Padua (1881).

His ideas were opposed, not only to theology but also to the tendency which, under Mamiani's influence, dominated the Italian Universities. His teaching has made a lasting impression and has aroused great enthusiasm, which was publicly expressed in a complimentary volume which appeared on the occasion of his sixtieth birthday (1898).

Ardigò's main problem is closely connected with his personal development. As early as 1869, in a lecture which he gave on Pietro Pomponazzi, in whom he discerns a predecessor, he described thought as a power which arises unnoticed and breaks out irresistibly when come to maturity. This was just his own experience, and was for him an example of how all evolution proceeds. In his Inaugural Address (Padua, 1881) he points to the course of his own development which has set him a problem. This problem reappears in wider relations just as the motion of a molecule can call to mind the rotation of the globe. All development consists in the passage from the indeterminate to the determinate in such a manner as to preserve continuity. The totality which appears more indeterminately in the first stage is always the foundation, the supporting basis of gradually unfolding articulation. The first scientific task he set himself was to follow out the natural development of human thought ("la formazione naturale del pensiero"). This project was not carried out; but we find the material which he collected employed throughout his various works. But the commencement was of decisive importance for his point of view.

Ardigò maintains that he reached his conclusions independently of French and English Positivism, since he only made their acquaintance at a later stage. If

his notion of the concept of evolution reminds us of Spencer's, yet the distinction remains that Spencer really relies on the analogy of biological development. Ardigò, on the other hand, relies on the analogy of thought-development, that most marvellous of the productions of nature ("la più miragliosa delle formazioni naturali"). Ardigò calls himself a Positivist. The most Positivist thing about him is his starting-point in experience, not his conclusion. The Positivist is in no hurry to get to a conclusion; he will form no idea which can be used as a party cry, but goes forward, step by step, gradually, as the truth dawns upon him. It depends on whether he has a clear view. This manner of thought appears in Ardigò, partly against materialism, partly against the tendency to rest content with a medley of disparate facts. In his latest work (*L' Unità della coscienza*, 1898) he treats the psychological problem in particular on these lines. Marchesini, a pupil of his, in a special essay, "The Crisis of Positivism" (*La Crisi del Positivismo*, Torino, 1898), has discussed the relation of Ardigò's philosophy to Positivism, from this point of view. He concludes that Ardigò's standpoint has in this a certain similarity to Wundt's. Villari and Anguilli, too, stand in critical opposition to the older form of Positivism, in the same way.

3. Ardigò rediscovers in the development of Nature the main principles which he found in that of thought. The evolution of thought is, for him, an example of a world-law. In his work, *La Formazione naturale nel fatto del sistema solare* (1877), he develops this law more closely, through analysis of the well-known hypothesis of Kant and Laplace, which he treats as the example of a scientific explanation. This book was, in reality,

composed only as a single chapter of a projected work on the development of human ideas.

According to this hypothesis, the present situation of the solar system follows from a process of separation (*distinzione*), smaller parts or units having coalesced within the great compact mass. But the totality is not therefore dissolved. The totality—the unarticulated (*l' indistinto*)—exists continually, and only thus it becomes intelligible how there can be a reciprocal action between the differentiated parts (the heavenly bodies). They cohere together now just as before their separation. The existence of the unarticulated is the ground of solidarity. If we ask how the manifold can be derived from the unarticulated, Ardigò replies that it is already there as a possibility in the original, or in latent situations (“forza latente, o virtuale”). The special form is reached through a gradual unfolding. He admits that this explanation is only an inference from experience. We cannot know beforehand what special forms and parts will be developed out of the originally unarticulated situation. Only observation and inquiry can demonstrate these. Neither mathematics nor metaphysic can construct nature. This is grounded on the fact that the unarticulated totality does not become specialised on its own, but, on the contrary, demands conditions unpredictable by us, and *so far* “contingent,” to obtain its special forms and parts. But even that which is gradually unfolded is still only the equivalent of that which already existed as coexistent in the unarticulated situation. The work which results from antecedent causes is stored up in the world-substance, and thus is conditioned the possibility of future activity.¹⁴ The continuity which in this manner obtains

between the *indistinto* and the articulated parts (*distinti*) we express by the word *Nature* ("la natura e la continuità di una cosa con tutti le altre," *Form. Nat.*, p. 205).

Nevertheless Ardigò sees clearly that the question must be raised, wherein this possibility or "latent power" properly consists. Possibility is for him a reality of a different quality from the given, and consists in an activity: "L' essere è attività" (*L' Unità della coscienza*, p. 479). Continuity is a continuous energy. Hence every unarticulated totality, every *indistinto*, points back to a still more comprehensive whole, out of which it has been separated. The distinction between *indistinto* and *distinto*, like that too between possibility and reality, is on this account only relative. A conclusion is here impossible. We come to an endless regress. The last word of science, however, concerns the fundamental relation of *distinto* and *indistinto*, and affirms that all variety, wherever it may present itself, springs from a whole, and is comprehended in a whole.—

Ardigò's doctrine of evolution is closely connected with his epistemology. Every explanation is a splitting up, an analysis. That which remains unanalysed remains unexplained. Thought will always be moving further forward, though it has a penchant for halting at a *distinto finito*—and what in this manner drives the thought further forward is in fact the infinity of nature. Indeed infinite nature is the energy of the particular laws of logical thought.¹⁵

That the law of thought or explanation is equivalent to the law of nature cannot be surprising when thought, like everything else, is nature, or a production of nature. But if thought is an empirical activity, like everything

else, and if it is only an example of natural production, it is impossible to explain the whole of nature from the fact that it is derived from thought, as metaphysic and theology would fain do. Even thought can pass from *indistinto* to *distinti* only by the universal law of evolution. We are thus taught to explain one fact through another without being able to arrive at an absolute conclusion. Nature is a boundless region, whose centre is everywhere, whose compass nowhere.—

Ardigò has let his epistemology absorb too much from his evolution theory. Whether treated psychologically or biologically, the evolution of thought is at most but an example of the universal laws of evolution. But the problem of knowledge crops up as soon as we ask how we are to ground the validity of the universal laws which we believe we have discovered, both for thought and for other phenomena. The problem is not glosed over by pointing to the law of evolution as common to all phenomena. It is indeed the peculiarity of thought that we comprehend and express by and through it all evolution and all law, as well of thought itself as of other things. The question is, then, what validity is possessed by this apprehension and this form of expression.¹⁶

4. Ardigò strives zealously to establish the independence of psychology as a science of experience. Here his talent for psychological description and analysis, and his knowledge of natural science, stand him in good stead. His interest and his gift for psychology go in two directions. Partly he seeks to find a greater coherence for conscious life than a provisional observation seems to warrant. He endeavours to bring out the continuity of conscious states, and of conscious with

unconscious states. Partly he endeavours to point finer shades of distinction and variety than are known to ordinary observation. He maintains that apparently uniform psychical states really consist in rhythmic movement. Some of his most prominent pupils such as the physiologist Giulio Fano, and the criminalist Enrico Ferri, made a special point of these peculiarities of his teaching in the book of essays published in honour of the venerable philosopher. In these two directions all investigation does and must proceed; but Ardigò had—as is shown, too, by his doctrine of the *indistinto* and the *distinti*, and their mutual relations—a particularly keen eye for them, and sought to unify them.

His main psychological works are: *La Psicologia come scienza positiva* (1870), and the book which he calls his philosophical testament, *L' Unità della coscienza* (1898). The task of psychology is, for Ardigò, the study of our inner states, whose common quality is expressed in the conception of the soul. The fact from which psychology proceeds is subjective, but it must be explained in an objective, physiological manner. This twofold explanation shows us the difference between psychical and all other phenomena. However great the significance of physiological investigations for psychology, yet physiology cannot replace psychology. It stands thus, that psychical and physiological phenomena are expressions of one and the same “substance,” the psychophysical substance, or, as Ardigò prefers to put it, the psychophysical reality—*realità psicofisica*. In his later works, in which his general evolution theory is outlined, the psychophysical reality is one with the *indistinto*.¹⁷ It is a natural whole which precedes and lies back of all the manifold which we call mind and

matter. The conception of the *indistinto* expresses here as always, unity and solidarity. Both materialism and spiritualism are grounded on mere abstractions. Physiologically treated, mental activity stands in relation with physico-chemical processes. Psychologically treated, the material as well as the psychical is given only as experience and idea; both motion and thought we know only as psychical acts. Instead of asking how matter can pass over into soul, it would be more correct to ask how our originally more indeterminate ideas can be gradually differentiated, so that some of them appear as the expression of a self, others as the expression of a not-self. The popular materialistic notion arises, according to Ardigò, from the fact that one does not perceive that qualities like extension and motion are known only through psychical functions, just as much as colour and smell, and the other so-called secondary qualities.

The idea of psychophysical reality is, then, as Ardigò emphatically insists, no explanation. Its importance lies only in that it maintains a coherence of which we are prone to lose sight in our abstractions. He compares it with the idea of gravitation, which is also no explanation. It remains for the future to discover a real explanation. The Positivist is in no hurry to get to conclusions. We cannot attain further than a temporary conception. The inner nature of the relation we cannot determine. But this is not for Ardigò the only riddle. How a thought can be the equivalent of a motion is for him no greater riddle than how a billiard-ball can by impact set another in motion. Throughout nature we know relations of simultaneity and succession only by way of experience, and not by way of insight

into the inner being of the components.—In this remark Ardigò overlooks, however, the fact that science, wherever possible, strives to transpose the external coherence of disparate phenomena into a whole of similar components, and that thus a higher grade of continuity is reached. The greater the opposition which this effort meets with, the more mysterious must that phenomenon be called with which we stop.

In his philosophical testament, the work on the unity of consciousness, Ardigò expresses his amazement at Kant's inspired presentiment of the doctrine of the unity of consciousness. True though it be that Kant is in error in the acceptance of too great an opposition between the material and the form of knowledge, yet he has seized hold of the fundamental scientific idea of psychology.

According to Ardigò, an uninterrupted process of composition and connection takes place in consciousness, in which all inherited and acquired dispositions and all new elements act together in determinate directions. From beginning to end there is a solidarity of all psychophysical functions, a continual tendency for them to unite themselves in a single current. The association of ideas lies back of this tendency to "mental confluence" (*confluenza mentale*). Often it is only discovered when regard is had to unconscious starting-points and intermediates, and especially on this account is the aid of physiology so indispensable to psychology. The unity which is the mark of conscious life cannot be explained as the mere product of the joint action of disparate elements, since we only discover these elements through a distinction which always presupposes a previously given unity. In general, it is observation

of conscious life that gives us our concepts of unity and plurality. Whenever we speak of the unity and multiplicity of the world, we have abstracted these concepts and the idea of their connection from living consciousness. Microcosm and macrocosm mutually explain each other.

5. Ardigò's ethics is derived from the same fundamental notions as characterise the other parts of his philosophy. The individual develops in society, and stands in the same relation to it as the disparate element (*distinto*) always holds to the unity (*indistinto*). Society develops (like the solar system and thought) through a natural process (*formazione naturale*) to describe which is the task of sociology. Ethics presupposes this. It is the task of ethics (as *nomologia*, in contrast to sociology, which is *nomografia* and *nomogonia*) to distinguish those elements in the social life which have lost their importance, from those which can be rendered fruitful in old or new ways. Thus the road is rendered passable for the morality of the future.

On account of his original and lasting connection with social life, an anti-egoistic feeling develops in the individual (Ardigò prefers this way of putting it to the word "altruism"). Human ideas derive their first content from social environment. The judgments and interests of the latter are, for a while, valid for the individual. Now all ideas have from the first an impulsive character, a tendency to pass over into immediate action. The separation of thought and action depends on a later differentiation (*distinzione*). Ardigò connects both the spontaneous acceptance of the content of the social idea and the primitive impulsive character of ideas, in the conception of social ideality

(*idealità sociale*). By ideality, he understands the capacity of being determined by thoughts that look beyond the present. Social ideality develops, in the first instance, in the family, as the continuous community, which fosters and protects the germ of the future race. Family feeling is a hearth-fire which can cast its glow over other regions. Social ideality has many grades and forms. It is trained in imitation and repetition. In all this Ardigò is developing a train of thought, which we find in antiquity in the Stoics especially, in modern times in Adam Smith, and in our own days in Tarde, Leslie Stephen, and Baldwin. Baldwin's conception of social heredity would fit very well into Ardigò's philosophy.

Social ideality is not developed in equal measure in all, although the human capacity for unegoistic action must be asserted. This is shown by family love, by spontaneous sympathy, by the claim to respect (which for an egoist is irrational), and resentment of infringement and injustice. At its highest, the ethical disposition is a sort of holy rage (*furore santo*), which assigns a particular advantage to self-sacrifice without thought, in the belief that something eternal and divine will be raised out of the tragic "down-going" of the human ("eterno divino che sorge delle ruine tragiche dell' umano"), an expression which Ardigò borrows from a congenial Italian novelist. The truth in the theological idea of Grace is that there is a spontaneous need, a passionate aspiration, which moves mankind to disinterested actions.

Such heroic action is possible without religion, as ethics is in general independent of religion, if we understand by religion, not a relation to the eternal

(as Max Müller defined it), but a relation to the supernatural.

The scientific concept of the eternal stands in sharp contrast to the supernatural ; it denotes the continuative function, whose limiting and particular form is the finite. The eternal is the law by which the particular being of the individual is conditioned; hence the profound satisfaction which the individual feels when his aspirations after the eternal are satisfied becomes intelligible. The Positivist finds the eternal within himself when he becomes conscious of the law of his own being. Here is once more reiterated the relation of element (*distinto*) and unity (*indistinto*). The idea of the supernatural originates when the law of the thing is made something disparate from the thing's activity, such as can only be brought into external relation with natural occurrences. The concept of the supernatural denotes only the theoretical side of religion ; and does not form the whole of it. The essential point is the relation of dependence in which the feeling of man can stand to the supernatural, in respect of his entire weal and woe. The holy was originally the dreadful ; dread created gods. At any rate, the feeling of the holy is not, as has been maintained, a completely simple and indivisible feeling.¹⁸ Stage by stage the element of dread is withdrawn in the passage from religion to scientific consciousness, which everywhere sets up law as the destiny of man's resolution, in place of the idea of a mysterious being. Religion always meets with a certain social ideality, and takes it up into itself ; hence it comes about that morality is independent of religion. Many forms of transition are here possible ; in the end it comes to a single "either . . . or." The artificial

maintenance of religion only brings it about that people are unprepared when its time has really passed away.

It is a tolerably elementary psychology of religion that Ardigò takes as his basis. He has not put forward a comprehensive discussion of the religious problem. His standpoint is essentially determined by his intellectual interest ; greatly also by the reaction, which the sharp contrast between his earlier and his later view of life must naturally have brought to pass. But we cannot help feeling surprised that religion could suddenly appear to him as a "poetical reminiscence," when he puts forward dread as the kernel of religion in its lowest as in its highest forms. The energetic thinker has certainly not drawn on his own peculiarly vivid experience here.

III

FRANCIS HERBERT BRADLEY

1. IF we look at the spirit and tendency of the most recent English philosophy, we cannot help coming to the conclusion that the classical English school—which begins with Locke, and of which Spencer is a later adherent—has ceased to exist. We may say that it has fulfilled its mission, which consisted in doing justice to experience, in the advocacy of the claim that problems arise out of experience, and in preparing the way for a practical reformatory endeavour. It begins with Locke's taking the experience of the individual as his ground, and ends with Spencer's making his ground the experience of the race. What is here emphasised is transmitted to other philosophical tendencies, and has helped to correct and recast them; it has ceased to be the mark of a particular tendency.¹⁹ The English school had, on the other hand, certain deficiencies, which became more glaring the more it entered into reciprocal relation with other lines of thought. Among these is the mechanical atomistic notion, which passed over from natural to mental science, and induced it to regard psychical life as the product of independent psychical elements, and society as the external con-

nection of independent individuals. In contrast to this, the problem of totality comes more to the front in recent times, partly as reaction, partly through the influence of German thought. The question is raised as to the ultimate coherence of elements, which must be presupposed if they are to produce a totality. A movement indeed took place, earlier in the nineteenth century, which proceeded in the reverse direction to the "insular" philosophy. This is attested by names like Coleridge, Carlyle, and Hamilton. But a methodical study of German thought was earnestly undertaken only in the last quarter of the nineteenth century. The lead comes from the University of Oxford. In Oxford the national English philosophy (Hobbes, Locke, Hume) had, even before this time, always met with opposition, more, indeed, on theological than on philosophical grounds. Now at length a real philosophical opposition is making itself felt.

As the first to arouse a great spiritual movement of this nature, we must refer to Thomas Hill Green (born 1836, Fellow of Balliol College, 1860; Professor of Moral Philosophy, 1878; died, 1882). Profoundly influenced by Wordsworth and Carlyle, he developed a peculiar religious idealism, for the philosophical groundwork of which he had to thank his study of Kant and Hegel. He exerted an extraordinarily extensive influence upon the young students of Oxford, chiefly through the ideality and enthusiasm of his personality. His activity extended, not only in the direction of science, but also in that of social reform and religious freedom. Almost all the younger generation of social thinkers in Oxford have to thank him for their awakening. His main works are his *Introduction to Hume*

(1874), a shrewd criticism of the older English school, and *Prolegomena to Ethics* (1883), a peculiar combination of epistemology and ethics, through the medium of which he strives after a non-empirical foundation for ethics.

2. England's most renowned thinker of recent times is undoubtedly Francis Herbert Bradley, who, born in 1846, lives at Oxford as Fellow of Merton College. During his student days he was influenced by Green, and also by the works of Hegel and Lotze. His bent towards retirement and reserve is continually increasing on account of his bad health. He is a Spinozistic nature; only he lacks Spinoza's realistic eye for psychological and social phenomena. With great energy of thought he is absorbed in a single idea, which is a continual stimulus to his reflection, and brings him nearer, now to scepticism, now to mysticism. Even severe critics recognise the stimulation and discipline of thought which the study of his masterpiece brings about. Yet his acuteness in particulars often leads to subtlety, and one feels abundantly the lack of empirical material in his special analyses. As far as energetic and unremitting reflection is concerned, he takes perhaps the highest place among contemporary thinkers, at least with regard to extreme ultimate problems. He presents a contrast to Wundt. Whereas the latter approaches the limits of thought with caution, but, once there, comes to somewhat hasty and dogmatic conclusions, Bradley hurries too quickly to the extreme bounds, but, when there, acts with vigilant criticism and discusses his problems from all sides.

Bradley's first published work was his *Ethical Studies* (1876). Here he appears as opposed to the atomism of English psychology. Consciousness, he maintains,

cannot be described as a mere collection of elements ; for it would be impossible to understand how such a collection could become aware of itself. Stuart Mill had attacked this problem (a fact which Bradley had not noticed) in a later edition of his *Examination of Sir William Hamilton's Philosophy*. This led Bradley to the study of German philosophy, which lays especial emphasis on the unity and inner coherence of consciousness. He judges the English line of thought severely, reprehending its one-sided and dogmatic character, and its lack of acumen, especially in the treatment of religion. "We inhabit an island, and our national bent of thought will, if we do not extend it, retain an insular character." This judgment itself suffers from one-sidedness. Bradley forgets that the critical philosophy was grounded more especially on Locke, and that the English empirical philosophy, with its claim to demonstrate the origin of ideas, was a powerful weapon against dogmatism.

The ethical aspiration of man sets out, according to Bradley, to realise his ego, to develop itself into a totality, into a harmonious and comprehensive whole. For it is the essence of the ego to be a comprehensive and at the same time a rich totality. Similarly the theoretical effort proceeds so as to think existence as a coherent and consistent whole. If we are unable ourselves to become a whole, we must make ourselves part of a more comprehensive whole, just as we must fashion the thought of a greater whole, when a smaller whole presents a contradiction. There is thus agreement between our practical and our theoretical nature. In our own nature we possess a standard of higher and lower. This depends on the degree of self-realisation,

and so on the harmony and independence which are met with in our thought and life. Man could not feel the pain of contradiction were he not a whole, and were he not possessed of the presentiment that he is so. Contradiction is aroused, partly by lack of harmony in inner relations, partly by their lack of agreement with outer.

The criterion of theoretical and practical perfection, which Bradley here advances, is the root idea of his entire philosophy. It includes the germ of a whole philosophy of life and of the world, as he developed it later (1893) in his chief work, *Appearance and Reality*. Before this he had given a treatment of the principles of knowledge in his *Principles of Logic* (1883).²⁰

The work on *Appearance and Reality* Bradley calls a metaphysical treatise, and he explains this expression by the fact that an investigation into principles is proposed, at the basis of which lies the recognition of reality as opposed to appearance. He will give the criterion by means of which it is possible to distinguish between higher and lower grades of reality. He will not give a System.

Bradley imagines various objections to the investigation which he is about to undertake. Perhaps it will be looked on as hopeless. But this cannot be a matter of original knowledge where there is not even the capacity of a metaphysical insight, *i.e.* of an insight into what criterion is to be applied to the distinction of reality from appearance. Or it may be said that the result will be valueless. But even if the result is imperfect, it will nevertheless possess a value of its own if it serves to enlighten us as to what reality is. Nay, even if we ended in complete scepticism, a useful counter-

poise would be thus produced to dogmatic tendencies, against theological orthodoxy on the one hand, and vulgar materialism on the other, which used to share minds between them. After making these remarks Bradley adds, There is yet a ground which, so far as I personally am concerned, has possibly the greatest weight. I believe that we all more or less feel that we point beyond the limits of customary activity. Each in his own way opines that he is in contact and communion with a Something lying above and beyond the visible world. In various ways we discover a higher something that both elevates and depresses us, both chastens and inspires. For some natures the intellectual effort to understand reality is the most effective way to experience the divine. No one who has not felt this, however variously it may be expressed, has concerned himself much with metaphysic. But where it is felt strongly it is its own justification. To make this statement, which opens a view into his inner life, better intelligible, and in order to avoid misunderstanding, Bradley adds: I was compelled to speak of philosophy as a satisfaction of what may be called the mystical side of our nature, which satisfaction cannot be reached by some individualities in any other way. It may perhaps appear that I was thinking of the metaphysicians as consecrated to a Somewhat that is too high for the great mass of mankind to be able to possess. But such a doctrine would be based on a deplorable error, on the superstition, namely, that mere understanding is the highest aspect of our nature, and on the false idea that intellectual effort, being applied to higher objects, is on that account higher effort. . . . No occupation, no endeavour, is a private road to divinity, and the path

by which speculation proceeds to ultimate truth stands no higher than any other. There is no sin which philosophy can so little justify as spiritual pride, however much the philosopher himself may be prone to it.

By these remarks Bradley contributes not only to his own characterisation, but also to the comprehension of the innermost kernel of all philosophical effort on a large scale. The heartfelt need of comprehension, and the continuous experience of the limitation of thought, the passionate straining of thought-energy, and the continual feeling that we do not think, but that "there is thought in us"—the intensive self-devotion to the thought-life, as if this were the only life of value, and the continual experience of another life proceeding within us and demanding satisfaction—all this can be read into the words of the English thinker. They are words to be taken to heart on account of the workman-like character which scientific labour is taking in so many fields.

Having touched on Bradley's general treatment of philosophy, I now go on to bring out the basic thoughts of his main work.

3. It treats of a critical investigation of the ideas by means of which it has been attempted to comprehend reality.

Concepts like "Matter," "Space," "Time," "Energy," with which natural science works, are excellently suited to the determination of the reciprocal relations of finite phenomena, but lead to contradiction when they have to express the true essence of existence. They are relative concepts which characterise things in contrast and in connection with each other; about

the particular things which stand in these relations, on the contrary, they say nothing. They go on in an endless regress, since the question can at any time be put, in what relation the components stand to the relations in which they occur, and since the investigation of the members results in their being able to be fixed in all of these relations. Such concepts are intellectual constructions, which may be appropriate and necessary in the special sciences, but which cannot illuminate the inner essence of existence. They are working ideas which have a technical, but no purely theoretical, significance. Consequently natural science cannot be a metaphysic, but on this account also there can be no strife between metaphysic and science. If we ground metaphysic exclusively on scientific concepts, it has the stamp of materialism.

If now we have recourse to the root concept of mental science, to the concept of the soul, this offers the advantage that we find in this region a more intimate coherence of unity and multiplicity than in the region where scientific concepts are applicable. The relation of unity and multiplicity is not so external in the soul-life as in physical nature. On this account, psychological experience is the highest experience we possess. But this also is unsuitable to express absolute reality. In the individual self, experience and analysis display opposition, variety, and relations, and the self as a whole is subject to change. It is thus impossible to comprehend the being of the self in a simple apprehension, to produce a conclusive concept of it. Consequently we can ground a metaphysic as little on psychology alone as on natural science alone. Idealism can as little express the whole truth as materialism. Psychology is a special science,

and every special science discovers only half-truths and operates with suitable fictions. The conception of the soul is as much an abstraction as the conception of the body. Reality can be neither "soul" nor "body." Our given is never more than events which offer two aspects for contemplation.

The presupposition of this whole line of thought, which tends to reject both materialism and idealism, is, however, the fact that we have a standard of what reality and truth are. Such a standard lies in the concept of experience. In this concept there is a close inner conjunction of two things, a compass and a harmony. Experience presupposes a given manifold and an inner agreement, a consequent and harmonious relation of the manifold elements with each other. Perfect experience would consist in an all-comprehensive content, unified with full consequence and harmony into a whole. Every experience which we really possess entails an approach to this ideal.

The standard is the same for reality and for value. In our practical ideals every side of our nature must be satisfied in harmony with every other side. Every unsatisfied impulse is an ineffectual thought; in all pain there is expressed a disharmony, and there is an incitement to do away this conflict.

This criterion shows us how closely we are related to reality. We cannot form an idea of anything that completely satisfies the standard. "We cannot construe the one absorbing experience to ourselves." The highest must be all-comprehensive and absolutely harmonious. But for us there is a continual opposition between extension and harmony or self-consistency, because our extension is too scant and our harmony too incom-

plete. Inner conflicts arise out of finitude, and can only be removed by a comprehensive content which annuls dependence on external relations, thus rendering it possible to attain inner consistency. Inner disorders are caused by outer disturbances. Hence only an eternal Being can be fully harmonious. The two ingredients of our standard for reality (and for value) stand in close relation with each other. In the theoretical field it is shown in the fact that we can remove the contradictions which experience presents only by widening our experience. Temporal relations especially hinder the attainment of the harmonious totality. They conflict with the criterion of reality and consequently have only a phenomenal significance. We can speak of progress and retrocession only in finite and imperfect reality. The Absolute can have no history, though it includes innumerable historical processes. It cannot be dated. No perfect, no true reality changes.

Our thought is always aspiring to something which is more than thought, our personality to something more than personality, our morality to something higher than all morals. There is no contradiction in the aspiration of a being after a perfection in which it is itself lost. The river flows to the sea, and the self loses itself in love. The higher must always be more comprehensive than the lower, but it must comprise the lower, or be this and yet more.

Philosophy leads, according to Bradley, to a healthy scepticism, to which science, compared with the richness of reality, is unimportant. Even the highest truth that we are able to discover is determined by a something unknown to us. We know not what other kinds of experience can exist besides our own. What we are

capable of attaining is only a foundation for our right to describe something as higher or lower than something else.

It fares with the ultimate puzzles of religion as with philosophy. Religion, too, is constrained to express the Highest through ideas which we take from experience ; nor does it insist, like philosophy, on a sufficient investigation of the essence and validity of such ideas. Treated in this view, philosophy stands higher, as knowledge, than religion. In another connection, however,—the attempt to express the complete reality of goodness through every aspect of our being—religion takes a higher place.

But is not this result unsatisfactory ? This question Bradley answers by asking in turn, Who says that we must find a complete satisfaction for all our needs ? Imperfection, disquiet, and unsatisfied ideality are the present lot of mortal man ! And he adds that every endeavour to represent a complete satisfaction always sets about making a selection of our needs, a selection whose justification is indemonstrable.

4. Bradley's philosophy is a thinking out of the problem approached by Wundt and Ardigò, but not explicitly undertaken in their treatment. Kant had brought it up in his doctrine of " Ideas " as conceptions of totality, and it has its origin in the essence of thought as a comprehensive synthesis. Bradley himself thinks that he owes much to Hegel, and, as is the case with other English philosophers in recent times, Hegel's acute dialectic impresses him considerably. But in fact, if he must be classified, he must be called far more a Kantian than a Hegelian. In some points he recalls William Hamilton. He demonstrates firmly, even at

the boundaries of thought, the consequences of the immutable laws of thought. He relies in particular upon two laws, the relational way of thought, and complete experience as a standard of reality. Both lead him to the same result: to the impossibility of halting at any point whatsoever, although we can advance step by step to a more intimate determination of reality.

A certain scepticism characterises Bradley, in that he lays more stress on the impossibility of a conclusion than on the possible closer determination of reality. Consequently he attaches to special and empirical knowledge too little positive importance for philosophy. The points of view with which we work in special empirical fields he stigmatises as useless fictions, merely practical compromise, without allowing for the fact that they would still be as useless if they did not lead us in any sense nearer to reality. He forgets Goethe's saying that nature cannot have either kernel or husk.

He is sceptical also in the sense that he explains several particular problems as insoluble. We cannot derive the manifold of reality, the many finite centres out of which we construct experience, all the Fragmentary, with which we must stop, from a single principle, even if the manifold is not opposed to there being a comprehensive unity. Why there should be "appearances" and not only "reality," we cannot say, but this does not prevent us from holding fast to the concept of reality. In particular the inorganic is a limit of our knowledge. The organic very nearly satisfies our conception of true reality as the harmonious and the self-contained, although disparity and disharmony are found also in the organic sphere; but the inorganic stands much further removed from this conception of reality.

Bradley is inclined to the opinion that it proceeds only from our ignorance that we assume an absolutely inorganic in nature. He admits that the special sciences must distinguish between the organic and the inorganic, on practical considerations, but he hesitates to attach absolute significance to this distinction. Here his divergence from Hegel comes out clearly. The Romantic philosophy of nature worked boldly with the thought of the whole of nature as a great organism. The problem of the relation of soul and body he also treats as insoluble. It is impossible to form a conception of how these two forms of existence are related to each other. In this he discovers a ratification of his general theory of reality. For the difficulty hence originates that we, putting soul and body in opposition, make two abstractions into real beings, and so treat "appearances" as "realities."

But scepticism is hardly the correct expression for Bradley's point of view. He does not rest content with a cleft between the labour and the goal, between appearance and reality. The Highest is present at every step, and every step has its truth. There are many grades and stages, but all are indispensable. We can find no province of the world so unimportant that the Absolute does not dwell therein. . . . Rather he should be called a mystic ; and that he certainly is, when his thought comes to rest, and when he enters upon a polemic against the concept of time and the importance of activity. Here he passes over to undisturbed contemplation, to a settled view, to a treatment *sub specie aeterni*. It fares with him as with Spinoza. For Spinoza's "Substance" is just the standard of reality regarded as a perfect Being, the standard of reality as an existing ideal.

I cannot grant that we can pass beyond the continual possibility of new processes, of new activity. Why then should not the Highest be self-development through time? In particular it will always prove impossible to eliminate the time concept from our knowledge. From the constant incongruity of thought and reality, and the constant necessity of new thought-effort,—for the individual as well as for the race—we might perhaps be justified in deducing the “metaphysical” consequence that existence itself is not a closed circle, but is still incomplete. For completed it *cannot* be if thought, which always forms part of existence, is incomplete. This notion leads to a more intimate relation between thought and reality than that at which Bradley finally arrives. For if time and activity are not Forms, which belong only to phenomena, to “appearance,” thought, just on account of its effort and labour, can be felt one with the inner being of reality.²¹ I will go no further into this now. I have developed it in the epistemological part of my *Philosophy of Religion*, and in my *Problems of Philosophy*.

In England itself Bradley has been criticised, partly from an empirical and critical standpoint (as by James Ward in *Mind*, 1894), partly from a standpoint which emphasises the economic and technical character of our fundamental concepts, and finds an idealist philosophy on the personal need (as in the work *Personal Idealism*, London, 1892, published by eight Oxford graduates). The latter believes itself to be a continuation of the line of thought which has dominated Oxford for thirty years. Its criticism is most justified where it attacks Bradley’s negative attitude towards those truths which are valid only under determinate conditions,

and maintains that we can possess a valid knowledge in spite of our incapacity to attain an exhaustive understanding of reality. On the other hand, it seems to me that the English criticism has not sufficiently recognised the profundity and energy of Bradley's thought.

IV

ALFRED FOUILLÉE

AND CONTEMPORARY FRENCH PHILOSOPHY

1. IN French philosophy Auguste Comte (1798–1857) stands out as the greatest figure of the nineteenth century. The extensive influence which he has exercised was clearly evidenced on the occasion of the unveiling of his statue in May 1902. Positivism is the most peculiar and the clearest line of thought displayed by France during the last century. During the greater part of this period it had to contend against a popular spiritualism, of which Victor Cousin and his pupils were the representatives, and which was favoured by the authorities. Then Taine and Renan exercised great influence about the middle of the century, not only in philosophical, but also very particularly in literary connections. Beside them, but a rather simpler figure, stands out Charles Renouvier. . . . At this point my *History of Modern Philosophy* has a hiatus, since I concluded my remarks about France with Comte. Now, too, I am unable to fill this gap. I can only give a brief sketch of Taine and Renan as an introduction to the French evolution philosophy represented by Fouillée, and later a similar sketch of Renouvier, in connection with the

part played by the principle of discontinuity in recent French philosophy. Monographs on these three men as philosophers would be of no small interest for the illumination of the course of spiritual development in the middle of the nineteenth century. The Royal Danish Academy of Sciences has set the task of a monograph on Renouvier, whose comprehensive writings are especially difficult of survey and specification; but no solution of the proposed question has yet appeared.

Hippolyte Taine (1828-93) is best known as a literary and art critic, and as critic of the "realistic" spirit. Danish literature possesses a commendable treatment of Taine from this point of view, in Georg Brandes' dissertation for the Doctorate, on Contemporary French Aesthetics. Taine, as a critic, endeavoured first and foremost to understand works of art and their producers. He inquired under what external conditions (*le milieu*) they are evolved, in what situation (*le moment*) they work, from what breed they are derived, what capacity displays itself in their works as dominant. The last element was really determined by the former three.

From his earliest youth, Taine worked among oppression and opposition, yet with unabated energy and enthusiasm. His early letters, lately published, portray him for us, as he was at this time, in an amiable picture. Later, as Professor of the History of Art at the *École des Beaux Arts*, he had an opportunity of amplifying the field of his activities. He was now working under more favourable conditions, with the same iron resolution which had been the distinguishing mark of his whole life hitherto. Especially characteristic of Taine as orator, author, and inquirer was the capacity of creating the picture of a whole out of individual frag-

ments. In his lectures—I speak from experience—one might at first feel repulsed by the dry description, proceeding part by part, attribute by attribute. But the material at his disposal was so exhaustive, his manner of description so energetic, that, before the end of the hour, the picture of the whole arose clear and lively in the imagination. I remember, for example, a lecture on Greek sculpture. Tainé's lengthy description was unaccompanied by illustration. But he made sketches in the air, and at length it appeared as if a statue stood on the table before him. His descriptive art took the opposite direction to that of Julius Lange, whose power lay in the analysis of the complete picture, which had been called up in his hearers' imagination, whether by illustration or by immediate excitation of fancy. Tainé went from part to whole, Lange from the whole to the parts.

Tainé produced a purely philosophical work in *De l'intelligence* (1870), a psychology in the spirit of the English school. It reveals strong influences of J. S. Mill, Bain, and Spencer. Of particular interest in this brilliantly written book is, in the first place, the explanation of the evolution of knowledge, through a struggle for existence among individual psychic elements. Elements are continually arising, says Tainé, with the stamp of reality, a sort of normal hallucination. These struggle *inter se*, and the conqueror is a sensation, a sense-perception, which may now be defined as "hallucination vraie." During this struggle further practical proof is given of the original motive tendencies of the elements of knowledge. Every sensation or idea is originally bound up with an impulse to motion. Gradually this motor tendency is worn away, and only then do

pure sense-perception and ideation arise. Finally it is also characteristic of Taine's psychology that it makes so much use of morbid situations to explain the nature of conscious life.

The latter trait has remained with later French psychology, perhaps because French neural pathology affords such admirable material (especially Charcot and his pupils). Ribot, whose first writing, *La Psychologie anglaise contemporaine*, appeared in 1870, has, in his later works, especially taken this road, and so with Alfred Binet and Pierre Janet. Modern French psychology has thus retained its own peculiar character, as English (with Ward, James, and Stout) has its own through analysis, and German (with the followers of Fechner and Wundt) has its own through experiment.

Earlier (especially in *Les Philosophes français du 19^e siècle*) Taine sharply criticised the dominant spiritualism (Cousin's school), and pointed towards Comte. But he was a positivist only in the widest sense of the term. Positivism was for him, as for Ardigò, the starting-point but not the conclusion. Partly he demanded that the analysis of concepts and situations should be carried further than the positivists of the strict school held necessary, partly he held fast to the problem of a conclusive philosophy, and believed, so far, in a metaphysic. Referring to this problem he concludes his work, *De l'intelligence*, with the following words: "I see the limits of my own spiritual capacity; the limits of the human spirit I do not see." In Taine's celebrated works on the history of literature and art psychology plays a great part; often, indeed, too great a part, for he is apt to proceed deductively and to derive an artistic phenomenon exclusively from a particular

element (a dominant capacity or a *milieu*). This prevents him now and then, *e.g.* in his treatment of Shakespeare, from detecting the finer nuances and the intimate psychical expressions. These become evident only when previous observation has been longer and analysis more assiduous. All these works appeared before 1870. It was at this time his intention to continue his purely psychological work and to amplify the book on knowledge with one on volition. The terrible catastrophe, however, which afflicted his native land, led him to the study of history. He would seek an understanding of the misfortunes of France, through its past, and create new hopes from this understanding. From this sprang the great work *Les Origines de la France contemporaine* (1876–94). The first volume (*L'Ancien Régime*) is of especial philosophical interest. In this he takes Toqueville as a type in essential points. So also the last two volumes (*Le Régime nouveau*) which no one who wishes to understand the nineteenth century should leave unread. They render important service to sociology. Of his treatment of the French Revolution, in the remaining volumes, it has been justly maintained that it establishes the scientific consideration of this event as against the declamatory or the demagogic. On the other hand, the objection has been raised that he occupies himself too much with general causes and obscures the influence of the special and momentary political situation. His hatred of tall talk incites him at the same time to a misconstruction of the enthusiasm which great hopes had called into life. How the *Marseillaise* could have originated in that period is unintelligible on his treatment.

Taine's view of life was determined by his tempera-

ment. On his own statement he was "un homme naturellement triste." The *coup d'État* of 1851 and the disaster of 1870 must have increased his dissatisfaction with his environment. He lived the greater part of his time in his work and in the world of thought. He felt that he must be absorbed in the great necessary coherence of reality. Marcus Aurelius and Spinoza were his favourite authors. In the matter of religion he sympathised with Protestantism, and after his visit to England he had hopes of a free religious movement. But he remained a Stoic to the end, and even during his last days he read Marcus Aurelius, "as a sort of liturgy." ²²

Ernest Renan (1823-92) presents in the course of his development an unusually lengthy succession of stages; and the art of the biographer, whose business it is to discover coherence in such cases, has not yet been applied to them. His childhood and youth he has himself portrayed in that work of his which, on account of its fervour and depth of feeling, stands out above the rest (*Souvenirs d'enfance et de jeunesse*). According to his own assertion, it was historical criticism that moved him to desert the ecclesiastical seminary and the Catholic faith. Then there soon developed in him a fervid belief in science, and the importance which its results were to have for the crowd. This philosophic and democratic optimism he expressed in a work (*L'Avenir de la science*), which he produced during the years 1848-49. But he did not publish it till much later, after he had lost the hope expressed in it. The Empire and the reaction imbued him with a pessimism from which he never freed himself. Later came the defeat, and the uproar of the Commune. As a scientist he was especially well

known for his historical works on language and religion, of which this is not the place to speak more at length. Under the third Republic a high scientific place was confided to him as Director of the Collège de France, and while he put the finishing touches to his labours his reflection meddled lightly and playfully with the great problem that had so powerfully occupied him in his youth. People of many classes listened to the sceptical causeur, of whom they knew—at least at third or fourth hand—that he was a man of eminence. In his expressions and writings of this period he was now humorous, now wanton, now sublime, now blasé. To many these fluctuations, whose centre—supposing they had one—was not very easy to discover, appeared as an expression of true freedom and genius. Intellectual work was for him at this time next to a game, which he undertook after his more strenuous studies by way of diversion. Every definite position on ultimate questions had become risky for him, because he had taken up so many various positions. Consequently he cheated himself and others of a valuable result of his long effort and inquiry. Of him it may be said with justice, “Il fut dupe de la peur d’être dupe.”

Renan’s importance as a thinker lies, during his later years, rather in his appearing as a symptom of a certain tendency of the time than in his performing any real work for philosophy. The secret lies perhaps in the fact that, in his heart, he adhered to the religion of his childhood, into which he had lived himself while he “was being brought up by women and priests” (in this education, he thought, was to be sought the explanation of his preferences and needs). Later he was animated by an echo of it, like the ringing of the sunken bell

which is still to be heard on the coast of Brittany, in calm weather. A general idealistic belief is, indeed, possible ; but it only satisfies so long as we live under the domination of old conventions. It will not last. We live, says Renan, in many places, on the shadow of a shade. On what will people live after us ? Renan did not get so far as a secure and manly attitude with respect to this question. He was merely goaded by it in certain moods.

Two philosophical works of Renan's are especially interesting, being typical of his later years. The *Dialogues et fragments philosophiques* Renan wrote in the spring of 1871, while he was detained in Versailles during the Commune troubles, but they did not appear till 1876. They include " dialogues of three philosophers of that school whose ground principles are the cult of the ideal, the negation of the supernatural, and the investigation of reality." The question as to the ideal end of the world's development is discussed. For there must be an end. The universe is not a mere succession of waves with no end at all. The end of evolution is not to be sought in the great mass of beings who have a minimum of enjoyment and culture, a maximum of labour. The end, says Renan, must be the domination of reason, and in this only a few can participate. The significance of the great mass can only be as the soil from which genius grows up. Genius—and intelligent men who know its value—is the end of history. It is regrettable that the ignorance of the crowd is the condition of reaching this end. But nature does not trouble about such things. It would lead to degeneration, to a sinking of the level, if the road of democracy were taken. On this road no gods are set

up. Democracy and science are antipodes. Evolution is characterised by the fact that instinct is succeeded by reflection, religion and art by science. Renan sees in this something that the Middle Age had already noticed in its own way. He found truth in the mediaeval arrangement of having men to pray for those who had no time to pray for themselves. The men of science should be the priests of the new age. There is here an indubitable echo of the priest in Renan, and it makes him, for a moment at least, come to rest in that solution of the problem of culture which, as we shall see later, was being taught almost at the same time by a German author, with quite another emphasis, if also with greater inconsequence. Renan was yet of the opinion that the Sage, who was the goal of evolution, could have very real affection for the people, so that his domination would be all for their advantage. Nietzsche tried to contest this.

A few years before his death, Renan published a sort of philosophic testament in his *Examen de conscience philosophique* (1888). (It appeared in *Feuilles détachées*.) An expression characteristic of Renan catches the eye in the beginning of this treatise. "The first duty of an honest man," it reads, "is to exert no influence over his opinions, but to let reality be reflected in him as in a photographer's dark-room, and to be present as a spectator at the inner struggles which his thoughts wage in the depths of consciousness. . . . At the inner changes of our intellectual retina, we must remain passive."—It is, of course, true that we, when we have to make up our intellectual accounts, ought not to encroach, but must seek out what has really been thought in us. But with the rise of particular items in the account, an

endeavour after determinate ends makes itself felt, albeit a spontaneous endeavour; just as we give our eyes such or such a direction in every glance, that what arrests attention may be taken in by the central part of the retina. It is, consequently, an illusion to suppose that one can be a purely passive spectator of the processes of the spiritual retina. Every scientific hypothesis, and every view of life as well, has the character of a venture. We in no way treat the struggle of fundamental thoughts and values as uninterested spectators. If we attempt this, it in no wise falls out to the advantage of thought.—

Two thoughts lie back of this philosophical testament of Renan's. The first comes to this, that in small as in great transactions we meet with the eternal. If we decide that within our world (or within our part of the world) we must rest content with experience, we have no right to the belief that its results have absolute validity. From the standpoint of eternity nothing is impossible, and the inscrutable future will cause many difficulties to vanish. Let us therefore strive no more, let us exert ourselves no longer, but let us hope!

The second thought is the complement of the first. In the midst of the mysterious and the uncertain which surrounds us come out the four sublime authorities of Love, Religion, Poetry, and Virtue, disputed by the egoist, yet leading the world further forwards. In these we hear the voice of the universe, or, if you will, the voice of God. This is the harmony of the heavenly spheres, this is the ring of the eternal. In them is expressed the deep-seated endeavour (*le nisus profond*) which raises itself on high through the development of the world, among the oppositions of recalcitrant material

(which in our part of the world is perhaps particularly recalcitrant). This endeavour will grow to clearness and power in a grade of which we can form no idea.

The philosophical testament is less playful and sceptical than the earlier pronouncements. The theory of great men as the goal of the world does not enter into it. Whether he had gone back on this does not appear. Equally little does it appear whether he still maintains what he had a few years previously expressed at the end of his treatment of Amiel (which is also to be found in *Feuilles détachées*). Amiel had fallen foul of him on account of the playful and ironical manner in which he had treated matters of the gravest moment. Renan replied that irony must be philosophy's last word. What the end of the world's development may be, we do not know; we do not even know whether there be an end. Perhaps the whole affair is "une mauvaise farce." And at no price ought we to let ourselves be hoaxed! By the fluctuation between two possibilities—that life is earnest, or that it is a bad joke—we nevertheless shun being *entirely* hoodwinked: while, on the other hand, through a definite choice of one of them, we expose ourselves to the danger of suffering a complete deception. We must be particularly circumspect on account of other men. On our own account we may take part in the great venture. But it is not allowable for us to mislead others into exposing themselves to complete shipwreck. Accordingly it comes to this, to be "ad utrumque paratus," and this is obtained by the fluctuation between belief and doubt, between optimism and irony.

Charles Renouvier remarks with justice on this, that through such fluctuations we may well lose our claims

in both directions, and he points to the possibility that what is real may be precisely the option.²³ It is very possible that the personal energy which chooses and maintains its place, and accepts the consequences thereof, stands nearer to the one reality of the world than the two possibilities described by Renan. Renan's previous personal and family history includes, perhaps, a psychological explanation of the point of view which he assumed in his later years. The contrast between the fulness of the beliefs of his childhood and the palpable vacuity of criticism had sunk deep into his life, and it seemed to him as if the only positive within him were no more than an echo after all, whose tones he could not prevent from dying away. Ardigò, too, treated religion in his later years as a poetic dream, but with the energy of thought and will he built for himself a new stronghold. Renan's Catholicism was of a very different type from that of Ardigò. As a young theologian he had become accustomed to take life passively from the outside, but not by energy of inner activity, by active participation in life. Consequently it was easier for him, later on, to be present at the struggle of thought, as well as the struggle of life, only as a spectator. He let his humours follow one another like the pictures of a kaleidoscope; no crystallising process went on within him. In addition to this, his Gallic temperament did not possess the capacity of unifying the contradictory dispositions into a totality of a determinate quality.

2. If we must name an investigator of whom it may be said that he carried on Taine's work in the philosophical sphere, the foremost must be Alfred Fouillée (b. 1839 [d. 1912]). Taine's strong emphasis on a regular coherence is found again in Fouillée, who

at the same time comes out as a determined opponent of the philosophical dilettantism of the aged Renan. Besides, Fouillée's philosophical works attest the idealistic direction which philosophy everywhere assumed towards the end of the century.

Fouillée worked as a professor in Bordeaux and Paris, but retired later to Mentone, on considerations of health.

His first writings are concerned with the history of Greek philosophy. Through the study of Plato he worked up to his own philosophical notions (*La Philosophie de Platon*, 1869). Plato treated the world of ideas and the world of experience as sharply distinguished, the former only being the true reality. Modern naturalism holds, on the contrary, that the world of experience, *i.e.* the empirically given coherence of nature, is the one reality. When Fouillée returned from the study of Plato to the problems of the present day, his task had to be "to bring back Plato's ideas from heaven to earth, and so to make idealism consonant with naturalism." Thus he himself denoted his endeavour (*Le Mouvement idéaliste et la réaction contre la science positive*, 1896, p. xxi). The possibility of this reconciliation he bases on the fact that thought (*l'idée*) can lead to action. Especially he emphasises that the thought of freedom is bound to arouse a striving and to set free power, whether we be "free" in the indeterminist sense or no (*La Liberté et le déterminisme*, 1872). Here we have already the basic thought of Fouillée's psychology and of his whole philosophy. This basic thought is expressed in the word "thought-force" (*idée-force*). According to his notions, this conception makes it possible to bring about an approximation of

various philosophical tendencies. He first used the expression in the *Revue philosophique* in 1879. Motor tendencies in the brain are immediately connected with thoughts in consciousness. We have here before us a process at once physiological and psychological, so that here an ideal reveals itself, expressed in the determinism of nature itself. Already it has been at work, in tendencies of organic evolution and growth, as also in instinctive sympathy, before the advent of conscious thought. A will is stirring in the whole of nature, both in external motion and in inner experience. The mental and the material, consciousness and life, the individual and the social, freedom and solidarity, act here as a single thing (*La Science sociale contemporaine*, 1880).

In *La Psychologie des idées-forces* (1893), the most important of his works, Fouillée has developed his main thoughts purely from the psychological side. This includes the best presentation of the psychology of Voluntarism. Fouillée defines psychology baldly as the study of will. He sees clearly that our volition is not an object of immediate observation. Instead, however, of drawing the conclusion, as some do, that we have no will, he—with perfect justice, I think ²⁴—demonstrates the opposite conclusion, that our will is one with ourselves. According to Fouillée, psychology has, up to the present, led to intellectualism. It has not been perceived that psychical phenomena are always the expression of an impulse or appetite, and are accompanied by pleasure or pain, according as they are gratified or checked. It comes to the same thing whether we treat phenomena from the physiological or the psychological side. If we set up these two aspects as opposed, we must reflect that, in them, we possess

only two abstractions (“deux extraits d’une réalité unique et totale”). Every distinction (*discernement*), even the most elementary, presupposes a choice, a preference (“*préférence, choix pratique rudimentaire*”). The distinction and the preference come to the same thing in the simplest circumstances, *e.g.* when the animal distinguishes between the pleasant feeling of satiety and the unpleasant feeling of hunger. Only that, however, is sensibly perceived, which is of importance in the struggle for existence; and it is the will (in the widest sense of the word) that incites sense-perception and determines its more differentiated forms. What is valid of sense-perception is valid also of recognition and memory. That which has practical interest is before all things recognised and retained in memory. Step by step the interest grows—in mutual reaction with experience—above the momentary and the proximate. Even abstract logical principles have been produced in this way. Every thought or idea denotes a more or less conscious tendency of our conative and perceptual life. In this is expressed a great continuity of all mental processes. Every psychic state may be called thought (*idée*) in so far as it consists in a distinction, force in so far as it consists in a movement.

Fouillée’s ethics is closely connected with his psychology. He especially insists that I cannot be conscious of myself without being conscious of other beings. I apprehend them on the analogy of myself, and myself in relation to them. With this relativity of our apprehension, a solidarity and an altruistic feeling are already given. It is to me a pure intellectual impossibility to make myself a self-contained being. The limitation of intellectual pride causes a limitation of practical egoism.

Here again we have an idea which is at the same time a force, since it is one with a spontaneous conation, which—when it is consciously recognised—appears as an imperative. The ideal lies in a prolongation of the tendency, into which our conation is spontaneously moved, and fashions itself (in virtue of the connection between relativity and solidarity) as the idea of a kingdom of freedom, equality, and justice. Fouillée has not yet put forward this notion of ethics in a coherent treatment, but he has certainly done so in various places in the course of his writings. It forms the basis of a critical work which is of especial interest for the history of modern ethics (*Critique des systèmes de morale contemporains*, 1883). [He has further developed his ethical views in *La Morale des idées-forces* (1908).]

In his general philosophy Fouillée attaches particular importance to the fact that no ground comes under discussion for laying out reality according to the most elementary phenomena or according to the most abstract points of view. Of this materialism is guilty when it makes motion everything. Motion is only that outlook on reality which rests on visual and tactual experience. Idealism is guilty of it when it makes thought everything. Thought is as much an abstraction as motion. The special sciences have, in general, a leaning towards making their special standpoints the one expression of the real. But every special standpoint is one-sided. Philosophy must apprehend Reality as a whole in which the special standpoints have, each for itself, their justification and their significance. Since, now, psychological existence is the only immediately given reality which is known to us, it is right to elaborate reality on the analogy of the self. Since Kant, thought has often

been regarded as separating us from reality, instead of being regarded as uniting us with reality. But metaphysic is directed to ground itself on the only immediate experience which we possess. The experience of pain being shunned is more immediate than that of matter being set in motion. Fouillée develops his metaphysical ideas more especially in *L'Avenir de la métaphysique* (1889).

All metaphysic is hypothetical, and it is grounded on analogy. It is the highest expansion sprung from the need of the personal life to find itself at one with the universal life. This universal life is to be apprehended as a society of conative forces. Metaphysical ideas are thus grounded, not only on psychological, but also on sociological analogies. The word "God"—which more or less always expresses an idea taken from human relations—signifies the innermost ground and aspiration of the universal community of existence. Here we cannot go further than a hypothetical scheme. We are unable to picture to ourselves the last synthesis to which our thought aspires, in the same way as we can imagine a special coherence among phenomena, of which we have determinate and complete knowledge. There is no need for us to import new dogmas in the name of morals, like the Kantians. Definitive ideas are not to be objects of irony or ridicule, as in Renan's dilettantism. Even in the need of acting according to our ideals, although the victory thereof be unknown, an idealistic presupposition lies concealed. "C'est une spéculation en pensée et en acte sur le sens du monde et de la vie!" The formation of this presupposition in set terms remains always hypothetical. Metaphysical systems wage an eternal struggle for existence, one

against the other. It is a question which of them flourishes best in the dominant scientific atmosphere. The greater the advance of knowledge, the more circumscribed do metaphysical possibilities always become. The victory will rest with that standpoint which does the most complete justice both to analysis and to synthesis. But the veil of Isis will never be drawn aside, and there will always be free scope for imagination and religious symbolism. This latter line of thought is directed not only against Renan, but also against Albert Lange, and against a thinker to whom in other respects Fouillée rather approximates, and with whom we shall be concerned later—against Guyau, namely.

3. Taine and Fouillée, like Wundt and Ardigò, are decidedly "continuity" men. Their endeavour proceeds towards the discovery of the greatest possible coherence in experience, and the completion of experience in such a manner as to preserve, as far as possible, the principle of continuity. The opposite to investigations of this kind is provided by a succession of attempts which, partly on empirical and partly on ethical grounds, maintain the significance of discontinuity. Such attempts are characteristic of the idealistic tendency of the transition to the twentieth century, while the idealism dominant at the beginning of the nineteenth century was really a philosophy of continuity. In French philosophical literature, the philosophy of discontinuity reveals itself in a particularly interesting and energetic manner. Three distinct motives may be distinguished as decisive for the philosophy of discontinuity.—Experience presents a qualitative manifold, whose reduction has been attained neither by speculation nor by the doctrine of evolution. Comte's

Positivism had already recognised the cleft which separates the various natural spheres from one another. For Comte every new science signified a special irreducible group of phenomena.—Secondly, in every particular group of phenomena, the causal principle can find only an imperfect justification. Hume is consequently pointed to once more, and his empiricism is set against the attempt of Kant and the evolutionists to overcome it.—Finally, reference is made to the consciousness of initiative, and of the power to put something new into the world through one's own thought and action; and the moral significance of this power is strongly emphasised.—With the two thinkers whom we will bring forward as representatives of the philosophy of discontinuity, these three motives work together in somewhat different ways.

4. Charles Renouvier is the Nestor of contemporary philosophy. He was born in 1818, and is still (1902) active as an author.²⁵ He received his scientific education at the Polytechnic School, and in his youth he was an ardent Saint-Simonist and republican. He has always lived a private life, yet he has exerted no small influence through his writings, and through a periodical which he published for some time. In his writings we meet with an energetic and scholarly thinker of earnest character; still his power, like that of so many other French philosophers, is greatest in the way of criticism. In the name of Logic, as of Morals, he comes out as the opponent of all forms of the doctrine of continuity, be they grounded on theological mysticism, on metaphysical speculation, or on scientific hypotheses. His activity as a critic and thinker began long before the period treated of in the works in question, My *History of Modern Philosophy*,

as I have before remarked, is here incomplete as regards modern France ; and I do not yet see my way clear to complete it. I pass over here his earlier works (of which the most important are the *Essais de critique générale*, 1854–69) and dwell only on his writings of the last quarter of the century. In order to get acquainted with his standpoint, the study of the following works is of importance : *Classification systématique des doctrines philosophiques* (1885), *La Nouvelle Monadologie* (1901), and *Les Dilemmes de la métaphysique* (1901).²⁶ Besides these there are important articles in the yearly publication of Pillon, Renouvier's friend and colleague, *L'Année philosophique*.

Renouvier has given a description of the course of his own development, in emphasising the fact that every system—as the work of a man who lives and thinks amid determinate inner and outer relations—is conditioned by personal factors which influence the standpoint selected. (See the chapter, “Comment je suis arrivé à cette conclusion,” in the second part of the great work on the classification of philosophical theories.)

In his youth, as we have seen, he passed through a period during which he was an ardent socialist of the school of Saint-Simon, and at the same time pursued his mathematical studies, specially occupying himself with the concept of infinity. Both roads led him to the philosophy of continuity. As a socialist he insisted on solidarity at the cost of the individual ; as a thinker he made all finite variety become blurred through infinite transitions and continuous processes. But in both connections doubts arose within him, and these were fed by his zealous study of Descartes and Kant. He saw now that every attempt to construct a system that is

to be valid for existence as a whole ends in contradiction. He was struck especially by Kant's doctrine of the Antinomies, even though he could not agree with Kant that neither thesis nor antithesis is refutable. He is of opinion that the thesis which maintains the finitude of the world is correct as against the antithesis, which maintains its infinitude. The contradictions in which speculation finally entangles itself are not the accompaniments of pure philosophic investigation, but rather of all theological attempts to harmonise God's immutability with his creative activity, and his infinitude and prescience with human freedom. Renouvier's thought is founded, not on pure theoretical interest alone, but also on the effort to set on foot a rational reform of religious ideas. Little by little, Renouvier was led to a peculiar form of the Critical philosophy, which in France is called "le néo-criticisme." I will now sketch its leading features.

The first principles of our general philosophy are, according to Renouvier, determined by a choice between the contradictions with which thought presents us. Thus we have to choose between the finite and the infinite. The concept of the infinite includes a contradiction if one understands thereby anything more or different from the possibility that thought is always susceptible of amplification (*e.g.* new parts are continually being added to my imaginative picture of space). As really given, the world must be finite, although our experience cannot comprehend it. Kant's theses are correct as against his antitheses. By this choice continuity is already interrupted, for with the concept of infinity, the possibility of an infinite number of phenomenal transitions has to go. Hence it follows

further that the causal principle can possess only conditional validity. Renouvier here joins company with Hume, and maintains, like him, the indemonstrability of the causal principle. New beginnings may come in, causes which are not, in their turn, effects. This is significant for morals, inasmuch as the freedom of the will is thus rendered possible. Philosophy cannot, consequently, be a construction. It can only teach us what happens before and after the pure origination, and how freedom is to be used in the right way. Freedom itself is a first truth in the world of knowledge ; it is a presupposition of which the determinist even has to avail himself when he elects to make necessity his first principle—only he involves himself in a contradiction which the voluntarist avoids.²⁷

Renouvier herewith embraces a decidedly voluntarist (or "arbitrary") epistemology, not only on account of his support of the choice of principles, but also because the principle chosen is that of freedom, discontinuity. The contradictions and difficulties which Renouvier meets or discovers in the history of thought move him neither to relinquish thought nor to play with it, but to hold fast, by means of an act of volition, to the view which seems to him logically and ethically right. He is decidedly the antipodes of Renan. Renouvier conducts his campaign against continuity, not only as regards the evolution of the individual, but also as regards that of the race. There is, he contends, no comprehensive historical law, but many laws, each of which is valid for its phase of history. Each individual phase is introduced by a new origination, by an act of freedom which might have fallen out differently than is actually the case. Renouvier sees such new beginnings in the

appearance of great men, and he disputes the notion that the rise of such personalities is the product of lengthy and extensive evolution, since their creative power is not in this way intelligible. He perceives a great danger in the historical method, which treats all actual happenings as if they were the only possibilities. According to this, everything must be taken as justifiable. He opposes the Romantic school, which has headed the introduction of this historical notion, rehabilitating all processes without regard to the possibilities of quite different lines of development present at every turn. In his *Uchronie (L'Utopie dans l'histoire, 1901)* he sought to demonstrate that the culture of the ancient world need not have fallen in order to be superseded by superstition and barbarism, and he pictures a reformation of the Roman Empire and of ancient religion, which lies within the bounds of possibility and would have spared us the Middle Ages. Through this "History of European civilisation, not as it was, but as it might have been," Renouvier proposes to corroborate the consciousness of freedom and responsibility, and to counteract the reactionary tendencies which spring from a worship of history.

Through his criticism of the concept of infinity and of the principle of continuity, Renouvier came to recognise the law of relation or the principle of relativity. The concept of relation was now for him the groundwork of our knowledge, the fundamental concept which comes to light in all categories with which knowledge works. Here he agrees with William Hamilton who had been the first to recognise this. All knowledge is attained by ascertaining the relations in which things stand. And every object which we know appears to

us on this account also as a system of relations. The principle of relativity is a method ("la méthode des relations") which springs from the very essence of our consciousness. Consciousness is itself a relation, but is distinguished from all other relations by the fact that it is a relation between my Ego as subject and my Ego as object ("relation de soi à soi"), a relation, that is to say, between identical components. Hence it is the basis of all other relations, which only become clear by reference back to this basic relation. From the law of relativity it follows that all knowledge is concerned only with phenomena, since all that we know must be present to consciousness and be determined by its laws. We know things only as the objects of concepts. If we desire to rise superior to phenomena, we can only do so through religious postulates. But even these postulates cannot dispense with the law of relativity: God can as little be infinite as the world. But by this method of postulates we rise above the world of experience. In his younger years, Renouvier was inclined to carry his republicanism over into theology, for he was of opinion that pluralism (in religious form, polytheism) was a consequence of relativism. Later he found such a great coherence in the world that monotheism appeared to him to be necessary, albeit he could not regard God as an infinite being. It is an exact consequence of the principle of relativity—as his opinion now was—that we must end with a first cause; so with a creation, as the limit of thought ("le point d'arrêt de la pensée"). Otherwise we lose ourselves in an endless process which can give no solution of the mystery. Renouvier is of opinion that many thinkers confound the continual regress of problems ("le reculement indéfini des pro-

blèmes”) with their solution. But if we end in this way with a cause of the world which is itself finite, all meditation as to the origin of this cause must be void of result, for this is the definite limit of thought. Here beginneth absolute ignorance.

The last option which determines the result of our knowledge is between the concepts “Thing” and “Person,” between a view of the world which subordinates the personal and subjective to the impersonal and objective, and one which proceeds on the analogy of the personal. It has cost human thought great and protracted labour to attain to an objective treatment, instead of the chaotic personifications of mythology. The thought of a regular objective coherence had to be carried through, because it is the presupposition and object of the work of personal existence. The concept of the object (thing, nature, substance, “idea”) has then such power over thought that the latter forgets that what is real is given only as phenomenal, as *its* object, and does not perceive that we only come to an intelligible view of the world when we set our immediate experience at the basis of the explanation of objective coherence. In these two ways, the epistemological proof of the logical priority of the subject, and the metaphysical explanation of nature by way of analogy, Renouvier arrives at a monadism, which he first presents in his work, *La Nouvelle Monadologie* (1901).²⁸ It is his conviction that, after the scientific understanding of the coherence of nature has been confirmed by strict and methodical science, the time will have come for a new application of the concept of personality, an application which can now take place with greater criticism and clearer consciousness than in mythological

fantasy or theological speculation. He depends here particularly on the concept of will. While he is in agreement with Hume that the validity of the causal principle cannot be proved, so that we must content ourselves with the recognition of an immutable succession in as many points of nature as possible, he diverges from Hume when he maintains that the concept of cause stands in inalienable connection with the nature of our consciousness, as one of the categories with which we must work, conformably to its own nature. Even more divergent from Hume is his doctrine that the causal concept has its ultimate ground in our consciousness of our own will. No relation between cause and effect is intelligible (*pénétrable*) to us, unless it can be explained as something analogous to our own volitional activity. The concept of will renders that of force intelligible to us, but cannot be itself defined by reference to something still more primitive. At this concept, thought must call a halt by force of the law of relativity.

With these presuppositions, Renouvier can easily think how conscious life arises and develops in the world. The germs of conscious life must be there to begin with,—according to the monadology—so that it needs only propitious circumstances for them to unfold. As an explanation of the origin of evil, he believes in a disharmony which appeared very early, as a sort of Fall of Man in the world of monads, which the Deity, itself limited and self-limiting, was unable to prevent. In his theological ideas he lays stress on the necessity of cogitating the Deity on the analogy of man, *i.e.* as finite and restricted. Then only can we seize hold of an ethical view of the world, whereas the doctrine of the eternal obliterates all antitheses, even the ethical.

While many thinkers (Bruno, Böhme, Spinoza), in that enlargement of philosophy which the Copernican doctrine set on foot, have had recourse to the idea of eternity, and have taken it up with zeal, Renouvier inculcates the doctrine that an unconditional significance for the ethical idea requires that man shall be made the centre of the world, as Aristotle and the Bible had already made him. "L'anthropocentrisme est le point de vue moral de l'univers." The external world is superior to us in mass and physical power. But our earth may yet perhaps possess something of far greater significance in psychical relations than belongs to the rest of the world; and if it came to psychical power, we should rather be capable, with our superiority ("supériorité d'agents intelligents"), to crush the universe than the reverse. Perfection always consists in limitation, and it is always, consequently, an imagination that leads away from a true perspective, when we lose ourselves in the unconditionedness of the material world. This recalls a well-known expression of Pascal, and is typical of Renouvier's standpoint. He takes it indubitably more consequently than does Pascal the corresponding principle. In general, it is characteristic of Renouvier that he, even when he is rather a mythologist and theologian than a philosopher, forms his notions with strict logic, and commits himself to no compromise. At the same time he is convinced that he busies himself with the field of bold conjecture and hypothesis. "I do not dogmatise," he says, "but I endeavour, on the contrary, to understand. What I have in view, in my bold conjectures, is the illumination of sublime possibilities. . . . When it is a matter of seeking truths which lie beyond experience, and which alone shall clarify

experience, Hypothesis, without other control than that of Logic and Morals, is the philosopher's only expedient. If he remain in agreement with the laws of pure reason, he has the right to maintain the probability of those principles of origination and of the nature of our world which agree with the laws of his understanding and with his feelings towards life."

I have only one particular, but for all that very important, critical remark to make before I leave the patriarch of contemporary philosophy. He rests his acceptance of a first cause, and therewith his entire philosophy of religion, upon the relativity - principle ("la loi de la relativité"). This law, in his opinion, demands that a limit be put to the continuous regress from effect to cause. The member of the series with which we stop must then, however, be described as a limit of the relativity - principle. This must indeed stand in relation with what is derived from it, but must not, on the other hand, be derived from any other, which is the case with all earlier members of the series. The relativity-principle is thus annulled if we refer back to the first member of the series. This comprises a decided self-contradiction, if, like Renouvier, we put forward the relativity - principle as necessary for our thought, and even deeply grounded in the nature of our consciousness. The relativity-principle requires that we proceed at every point step by step, and when we give this up, our understanding ceases as well. Yet the law of relativity leads to a doctrine of infinity, in so far as it cannot be at any optional point conceded that we have reached an absolute starting-point. Renouvier is right when he says that reference to an endless process yields no explanation. But the fact is that we can get no other

comprehension of a series which in virtue of its law can be carried on for ever than that which lies within the law itself.²⁹ Here a mystical tendency displays itself in Renouvier, which gains the upper hand over his critical bent. Instead of plunging into an inner coherence of phenomena, he is willing to be appeased with a primary origination, and then offers us only the option of taking this origination as thing or person. Even on the relativity-principle the critical philosophy must reject this dilemma. The philosophy of continuity is, especially if the need of comprehension is emphasised, always preferable to that of discontinuity.

5. While Renouvier works with sharply pointed postulates, and energetically announces the great interruptions of continuity, Emile Boutroux (born 1845, Professor at the Sorbonne) seeks rather a purely theoretical basis for the philosophy of discontinuity, and directs his attention in particular to small differences. In Boutroux's philosophy, we follow up the continuation of a tendency which, during an earlier period of French philosophy, had been taken up by Maine de Biran. (See my *History of Modern Philosophy*, vol. ii.)

In two important compositions (*De la contingence des lois de la nature*, 1875, and *De l'idée de la loi naturelle dans la science et dans la philosophie contemporaine*, 1895) Boutroux discusses the causal principle in the various forms in which the different sciences are capable of applying it. It is his main object to demonstrate how far distant we still are from the accomplishment of this when it is advanced in the powerful form in which the mechanistic apprehension of nature employs it. Especially in the transition from one empirical field to another do we meet with relations of discontinuity, *e.g.* in the

transition from logic and mathematics to mechanics, from mechanics to physics, and so forth through chemistry, physiology, psychology, sociology. The fundamental principles of the more concrete sciences cannot be traced back to those of the more abstract; every new empirical field requires new special principles, which are not included in those of previous fields. On this point Boutroux discovers that he is in singular agreement with Comte, who had already laid strong emphasis on the discontinuity of principles, in the transition from one science to another, and was decided in his caution against the attempt to derive the principles of a more concrete science from those of a more abstract. Boutroux has himself remarked how he here agrees in a certain sense with the founder of Positivism. In a brilliant sketch of Comte, which served as introduction to a discussion of the French Philosophical Society, he insists on those elements of Comte's philosophy which illustrate the strictly empirical standpoint that he had endeavoured to maintain. (*Bulletin de la société française de philosophie*, Séance du 27 novembre, 1902.)

It is, according to Boutroux, a peculiarity of the concrete sciences that they depend on a totality which is cogitated as consisting in elements without its being possible to contemplate a relation of equivalence between such a totality and the elements which are cogitated as its component parts. There is, *e.g.*, no relation of equivalence between a man as totality and the elements which may be contemplated in his organism. Consequently we are here always thrown back on experience. It alone can teach us what totalities are originated by the mutual reaction of elements. Thus it comes out clearly

that the causal principle is an abstract law, which does not exhaust the body of concrete reality. During the actual development, unforeseeable, and, so far, contingent variations (*variations contingentes*) do not arise. The history of the thing holds for us the key of its essence, but it cannot be derived from its nature. The dynamic point of view preponderates over the static the more we pass from abstract to concrete science, and qualities dominate instead of quantities. The laws of nature only give the constant relations under which changes take place, the habits, so to say, which things display. Change is the principle, permanence only a result. The constant in nature, the so-called laws of nature, is the bed in which the stream of occurrence flows, which the stream itself has hollowed out, although its course has been determined by this bed. If more profound variations entered into the things themselves, this river bed would be able to alter its form and direction. Even objective, logical relations would then be subject to variation.

When the changes through which the development from the elementary to the higher forms of existence takes place cannot be brought into a relation of equivalence with the preceding circumstances, so far is chance predominant. But this can be explained as the outward and visible sign of freedom. Freedom itself cannot be immediately experienced. It expresses itself, however, in human action, whenever a habit is overcome. In the psychological sphere laws relate only to that, the accomplishment of which the soul relinquishes to habit. Here, as always in nature, habit means that through the mechanisation of the most necessary functions force may be set free for new work.

Boutroux thus treats free development through the production of something new as the peculiar work and activity of reality, as the particular reality. The constant forms and laws are only what we call results. Had he, when writing his brilliant articles, been aware of Hugo de Vries' *Theory of Mutation*, he could have used it for the purposes of his position, since this theory accepts intermittent variation and the emergence of new types. He plainly sympathises with Lamarck's theory which believes in an inner endeavour and striving of the living, moving it to accommodate itself to its environment, and so to evolve stable forms.

In his book on the concept of natural law in modern science, however, Boutroux insists on still another point of view for the constant in nature. Epistemologically treated, what we call the law of nature is the summary of the methods which we have discovered for making things conformable to our intelligence ("assimiler les choses à notre intelligence"), and for employment in attaining our ends. What is in this way valid for the concept of natural law is valid also for all concepts which we produce in order to understand things, and especially of the distinctions which we undertake, in order to be able to see more clearly. Though we distinguish so sharply between thought and motion, and perchance believe that these two spheres are separated by an abyss, we have no right to attribute absolute significance to this distinction. Our concepts and conceptual distinctions express far rather the way we treat things than the way things exist in themselves. In these remarks Boutroux approaches the economic epistemology, which will be touched on in the following section. Had he carried through the epistemological treatment hinted

at in this place, he would perhaps have arrived at the conviction that the "chance" which he explains as the expression of "freedom" denotes simply no more than a negative limit of investigation, which perhaps is not definitive, but which propounds new questions. The philosophy of discontinuity is dogmatic, when it treats as absolute the differences or originations, before which we make a provisional halt. The problem must in that case be eternally cropping up, how new variations originate. That they appear to our perceptions to arise of a sudden, they have in common with many occurrences—the nearer one looks, perhaps with everything that takes place in the world.



SECOND GROUP

EPISTEMOLOGICO-BIOLOGICAL TENDENCY

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EPISTEMOLOGICAL considerations were by no means foreign to the group of thinkers with whom we have been occupied in the foregoing pages. The question under discussion is, ultimately, with them, how far any of the special points of view, which the special sciences apply to their own territory, is inclined to provide the principle of a coherent and provisionally conclusive view of the world. But the difficulties in the way of answering this question must quite naturally provoke the need of investigating *de novo* scientific standpoints and principles, their origin and the significance of their validity. The contribution which natural science can afford to a general view of the world, would—not least in the sphere of the natural scientist himself—be admitted into renewed discussion. People have been apt to treat what is called the mechanical apprehension of nature, which is grounded on Galileo and Descartes, and which refers everything to pressure, shock, and attraction, rather as a truth of the highest value than as a hypothesis. Now new phenomena appeared (chiefly in the field of the electro-magnetic theory of light) whose explanation in accordance with the mechanical notion of nature is bound up with difficulties. Also the fact impresses itself that we ought not to treat a theory as absolutely justified, because it is ratified by experi-

ence, so long as the possibility of another theory, whose consequences may be in equal measure confirmed by experience, is not excluded. In the same direction acts the importance which we attach to evolution, to the continuous widening of the bounds of experience, and to a possible change in the inner structure of our mind. Thus the dynamic gets the better of the static, and our epistemology can possess validity only for a certain stage of evolution.

When, in short, the volitional element is so strongly emphasised, especially in the advancement of principles, we are not far removed from the discussion of the question, what end we specially propose in our knowledge, and what are the means at our disposal for approaching it.

In these various ways we are led to that group of thinkers which we have denominated the epistemologico-biological. In this group I count first some well-known scientists, who, partly by their special investigations, partly by the study of the history of their science, have been stimulated to reflect on the presuppositions of knowledge; and then a philosopher, who has put forward a more searching inquiry into the rise and disappearance of problems during the course of life and evolution.

I

PHILOSOPHER-SCIENTISTS

1. THE distinguished physicist, James Clerk Maxwell (born 1831, in Edinburgh, died 1879, as Professor of Physics at Cambridge), especially well known for his development in mathematical form of the electro-magnetic theory of light, is important for the history of philosophy, on account of the interest which he fostered in making a clear arrangement of the first principles of his science. William Hamilton, whose lectures he heard during his undergraduate days in Edinburgh, gave the impulse to his philosophical interest ; here he received (according to his biographer) an impulse which never ceased to be active. Hamilton, on his side, felt himself equally attracted by the acute and curious young student. Maxwell's treatment of the essence and of the significance of Thought recalls, later on, when he was able to ground it on his own profound researches, decisive points of Hamilton's philosophy. Those works of Maxwell which are especially relevant here, are to be found in the two volumes of his *Scientific Papers*, which were posthumously collected and published.

It has been maintained, says Maxwell, that metaphysical speculation belongs only to the past, and that physics has destroyed it. There is, however, no present

danger that the discussion of the root-concepts of existence should be concluded in our time. The exercise of speculative capacity will remain for every fresh mind just as attractive as it was in Thales' time. But it depends whether thoughts are evolved with which we can work. The progress of the exact sciences depends on the discovery and development of appropriate and sufficient ideas, by means of which we are able to give a psychical representation of the actual—a representation which is both sufficiently universal and able to stand for each particular case, on the one hand, and is sufficient to produce the basis of a mathematical solution on the other. This is the road which has been pursued from Euclid to Faraday.

Upon the question how it occurs to us from the beginning to assign a principle to determinate field, Maxwell refers to the importance of analogy for science. By *physical analogy* is understood the resemblance of the laws of two fields of experience, which renders it possible to explain one field by means of another. Thus all application of mathematical laws to science is based on the analogy of the laws of physical mass with the laws of number, and the endeavour of exact science is to set about leading back the problem of nature to the determination of quantities by numerical operations.³⁰ A similar constitution is proper to the whole of what is called the mechanical view of nature. This depends on the analogy of the laws of the qualitative changes in nature with the laws of motion. Hence it is possible to describe the modifications of body as if they consisted only in the motion of the smallest parts. A description of a phenomenon which renders it possible to treat it as an example of a principle applicable also to other phenomena, is an

explanation, and experience shows that every such explanation is accompanied by a peculiar psychical satisfaction. If the analogy is valid we need not employ ourselves in making determinate ideas of the nature of these smallest parts; there is no need whatsoever for us to attribute to them extension, form, hardness, or softness. What we must presuppose for the ultimate parts of matter is the constancy and regularity of their movements. It is the constancy and continuity of motion that lie at the root of the concept of matter.

On the last points, Maxwell agrees with thoughts which had been asserted earlier by Faraday and W. Thompson (Lord Kelvin).³¹ *Only by means of motion*, he maintains, *do we understand rest and equilibrium*; consequently, kinematics (the theory of motion, apart from the quality of the moving) must precede statics (the theory of the conditions of equilibrium). Kinematics is distinguished from geometry only in that time is explicitly introduced into it as a commensurate quantity. Yet geometry, in its relation to the doctrine of motion is, in fact, derivative, or is a part of the latter; for geometry is peculiarly concerned with the process by means of which figures are produced in space. A line is not originally a mark on the blackboard, which can equally be called BA as AB, but it is the locus of a motion from A to B. The idea of motion lies back of the idea of form. That this is the case is the conclusion, too, of the psychological doctrine of attention; it is at every moment confined to particular, singular ideas, but it moves forward by way of a continuous ideal succession. We are far too much accustomed to hold fast to ready-made symbols and figures, and to overlook the genetic process of sense-perception and of thought.

The principles of knowledge thus spring from analogy, and are applied to change earlier than to rest. A third point has already become clear ; the truth of principles consists in their validity ; but their validity consists further in their *applicability*, their capacity for setting inquiry in motion. The significance of a principle consists in its occasioning the proposition of quite definite questions. Thus, the significance of the principle of energy consists in the fact that all physical phenomena can be treated as examples of it, so that the question may be asked, at every new phenomenon, What form of the energy - principle is happening here ? Whence and whither ? To what conditions is the effect subjected ? Thus, the assumption of action at a distance, even though—as Maxwell himself believes—it be untenable, has great scientific importance, in that, in order to answer the question how bodies could mutually react from a distance, the intervening medium has been zealously investigated. This makes us think of William Hamilton's dictum that a living lie is better than a dead truth. Maxwell applies this attitude even to the atomic theory, the presupposition of the mechanical view of nature. After demonstrating that none of the causes which we call natural is capable of explaining the existence of atoms, and especially their similarity, he asserts : Is it the case that our scientific speculations have now arrived at a point among the visible appearances of things, and stand at the entrance of the world of order and perfection, which is to-day, as it was created, perfect in number, mass, and importance ? Perchance we err. No one has yet seen or felt an atom, and perhaps our atomic hypothesis will be superseded by a new theory of the constitution of matter. Yet the idea of innumer-

able particular things, similar and immutable, has not arisen in the human consciousness without bearing fruit. Thus, even if the atomic theory be not "justifiable," it may have been useful for a long time. Maxwell speaks in analogous terms of this conclusion: since a continual dissipation of physical energy comes about, there must have been an original state, which cannot have arisen naturally. It is not sure, he observes, that this hypothesis is the last word of science; moreover, this dissipated energy itself appears to be the only energy for which we cannot find an application. It is here the same, he adds, as when we are dealing with perturbations, which hinder the clear enunciation of a natural law: these are, in fact, particulars which we do not know, or which we have overlooked, or which we have been compelled to relegate to later investigation. "Perturbation" is an imaginary, not a natural fact; in the activity of nature there is no perturbation. We might be listening to Spinoza.

Yet there are other places in which Maxwell is not so methodical and consequent. As is the case with not a few natural scientists, theological ideas sometimes lie in wait for him, and discover themselves when he believes that he is standing on an absolute frontier; or, much rather, perchance, seduce him to the belief that he has reached a limit of this nature. As Descartes derived the highest laws of nature from the will of God—as Newton explained that the original cause of the coherence of the solar system could not be found in nature—and as Linné and Cuvier explained that of organic types, and, more recently, Lord Kelvin that of the origin of life,³² so Maxwell teaches in some places (which cannot be harmonised with the passages cited

above) that the similar and immutable atoms, which all bear the stamp of the factory, must have been created. We stand here, he adds, in this way at the barrier of all science, for science cannot discuss creation out of nothing. The arising of an atom is an event which cannot have come about in the natural order under which we are now living. But such an event must have come about, since it would be absurd to cogitate absolutely similar elements as existing from eternity. Wherein exactly the absurdity lies, Maxwell does not say, and his atomic theory has here a more professedly dogmatic character than in other passages, which agree better with the intellectual energy of the discriminating investigator.

In another point, too, Maxwell discovered a limit of science.

Although, he asserts, the soul has for a long time been called immaterial, yet the presumption was, until recent times, at the root of this, that, though we were indeed unable, on anatomical or chemical lines (by dissection or assay), in an investigation of the brain, to come by the discovery of the soul, yet, if we only went far enough back, we should meet with a material motion which had no material cause, but was instigated at the direct instance of a soul. This view is, according to Maxwell, contradictory to the principle of the conservation of energy, and he maintains that we would trust no experiment that gave a clear difference between the work given out by a living being, and the energy which it receives and dissipates. But how, then, can consciousness have arisen? It boots nothing to attribute psychical qualities to the atoms, for consciousness cannot be explained as a product of psychical atoms. When we come to the depths of personality, we find ourselves across the

frontier of science. The objective actual comes to an end. The most primary of all the propositions that are valid of the subject, "I am," cannot be used of two persons in exactly the same sense, and cannot, in consequence, be an object of science.

On this last, it may be observed that, if we are capable of demonstrating with what distinction two persons use the same thought, we must also be capable of observing and comparing their thoughts, and thus an empirical psychology has already arisen. Here, also, Maxwell calls too early a halt; and this is the more singular in that he himself appeals, in a passage quoted above, to psychological observation.

2. With Ernst Mach (born 1838), a philosophical interest of very early origin co-operates with scientific investigation, and especially the study of the history of natural science, to propound the problem of knowledge in a new and peculiar form. This course of development comes out clearly in his professional career as a teacher. First he was, for a number of years, Professor of Physics, at Prague, and later became Professor of Philosophy at Vienna. His works are chiefly concerned with the history of natural science (*Die Geschichte und die Wurzel des Satzes von der Erhaltung der Arbeit*, 1872; *Die Mechanik in ihrer Entwicklung*, 2nd ed., 1889; *Die Prinzipien der Wärmelehre, historico-kritisch erläutert*, 1896). With the *Analyse der Empfindungen* (1886, 4th ed., 1903) he produced a work of pure philosophy.

Mach was only fifteen years old when he came across Kant's *Prolegomena* in his father's library. This book, as he has stated later, made a powerful impression on him, and he considered himself lucky to have had an early acquaintance with its argument. But he did not

always remain a pure Kantian ; he found the *Ding an sich* superfluous. Moreover, the study of Spinoza, Herbart and Fechner impressed him later on. He made it his aim, as he put it, *to take up a standpoint which he need not abandon, when he passed from physics to psychology*. All sciences must, ultimately, form a whole. Mach saw clearly that the atomic theory, as usually understood, did not allow of his retaining this standpoint in the passage from physics to psychology. We are in a more favourable position, if we read all bodies, from the first, as thought-symbols of the complex of experiences. The world, then, does not consist of mysterious existence in mutual reaction with a mysterious self. Colours, tones, spatial and temporal relations, and so forth, are only the ultimate elements, whose coherence is worth investigation, and which we connect and mark off in the most expedient manner, in theoretical and practical relations. There is only a great coherent mass of experiences, most intimately held together in what we call our self, which is thus opposed to what we call the world. Self, World, Mind, and Matter, and such concepts, are, however, only thought-symbols which denote limits and distinctions, whose retention has been recognised as more or less expedient.

Mach gave expression to this view as early as 1863, in his lectures on psychophysics. The study of the physiology of the senses had in general a great influence on his line of thought. It convinced him, for example, that the notion of space is bound up with the senses, and that it is, in consequence, valid only for sense perception, so that we are wrong to attribute spatial qualities to the atoms, which are not sensibly perceptible.

It is the task of science to give an *economic* presenta-

tion of the facts, *i.e.* a presentation in which we make use only of the strictly necessary and most serviceable ideas. In this view of the task of science, Mach recognises Maxwell as his predecessor, but is of the opinion that Kirchhoff, who supports a similar notion, has the advantage in point of priority.³³

This view of the nature of science agrees very well with the evolution hypothesis. Mach is attentive to the fact that Spencer, even before Darwin, treated psychical processes as *accommodations* to the given. He himself, relying on the history of science, developed this biological attitude in his *Rede über Umbildung und Anpassung im naturwissenschaftlichen Denken* (1884). Accommodation consists partly in a linking up, partly in a reduction; partly in unification of the manifold in a single view, partly in dividing off that which is not necessary to intelligence. What facts lie at the basis of this depends on convenience, tradition, or custom. But the facts themselves, which serve the purpose of orientation, cannot be "understood." If, *e.g.*, mechanical relations seem to us more lucid than others, it is because we are more used to them. Our intelligence always consists in the reduction of unusual unintelligibility to usual. Certainly, in science, every customary judgment to which we attribute validity in another than its original sphere, is put to the proof as to whether it suits the new circumstances; otherwise it becomes a prejudice. Our knowledge struggles continually forward, through the conflict of judgment with prejudice. As the living being does not produce immediately a new organ for a new function, when it becomes necessary (*e.g.* when a vertebrate has to fly or swim), but seeks to make use of organs already to hand, so science makes use of a transforma-

tion of older ideas for the treatment of new experiences. In Newton's "attraction" still remains something of the old idea of seeking the natural place. It amounts to thinking the new in the simplest way, and according to the principle of economy.

Arithmetic saves direct enumeration, for number expresses just that two kinds of arrangement can be identical, even if the matter arranged is various. Maxwell already taught, as Mach himself remarks, that the validity of the concept of number rests on analogy. Geometry investigates the reciprocal relations of different standards, and thereby saves us direct measurement. Visual and tactual space are different; but a description in terms of the one corresponds to a description in terms of the other. Quantitative arrangements are simpler and more comprehensive than qualitative, and facilitate the survey and treatment of larger groups of experiences. Such arrangements are rendered possible in natural science by concepts like "force," "mass," "atom." These concepts are only means of thought, whose significance consists simply and solely in the fact that they recall to memory experiences arranged economically, however much most scientists have attributed to them a reality apart from thought. The causal relation denotes only the closest connection which any description is capable of expressing. It has only a logical, not a physical significance. The same is true of the principle of continuity; we maintain continuity where it is recognised that the diversity increases with the distance between the members of a series, while it diminishes the more they approach each other, and finally, for us, vanishes. The advantage of applying the continuity principle wherever possible, consists in our proposing

similar treatment for the smallest distinguishable parts of the system concerned as for the greatest parts. Only experience is capable of deciding how far this may be continued.

The economy of thought, during the adaptation to experience (as may easily be seen from the foregoing), stipulates the continuous application of analogies. In his article, "Die Ähnlichkeit und die Analogie als Leitmotiv der Forschung" (in the first volume of Ostwald's *Annalen der Naturphilosophie*), Mach handles this conception. Analogy denotes such a relation of two conceptual systems to each other, that both the distinction between two correspondent concepts of both systems, and also the agreement of their reciprocal relation, come clearly to light. It renders possible the uniform apprehension of dissimilar facts, and is consequently of great biological and epistemological importance, for the whole theory of science. But analogy is not identity, and the means of inquiry must be carefully distinguished from its results.

The mechanical view of nature is grounded on a comprehensive analogy between the motion of masses in space and the qualitative changes of things (*e.g.* of temperature, of electrical relations, and so forth). That this analogy can be carried through to so great an extent does not justify the assumption that all physical processes are "merely" mechanical. Mechanical laws can serve as formal patterns and finger-posts. The movements of bodies in space are the simplest and plainest processes which we can most easily follow in imagination. Moreover, every physical process, whether of heat, electricity, sound, or what not, has a mechanical side, expressed in expansion, trembling, attraction, or what

not. Hence we may give a clear account of physical processes in mechanical analogies, and explain them thus, although we are not justified in saying (like Wundt, for example) that all physical causes are causes of motion. Purely mechanical processes, indeed, there are not, for, beside mere motion, magnetic and electrical action, and heat processes are always asserting themselves. Every process belongs really to the collective field of physics. This notion of our knowledge is no dissolution of science. It deprives us of nothing really valuable, only of superfluous points of view. But it removes the dogmatism which has crept into many investigations.

The general philosophy which becomes possible on such a basis cannot be a materialism. The qualitative variety of experience cannot be derived from purely qualitative relations and connections; the psychical cannot be derived from the physical. Physics and psychology are concerned, in reality, with the same thing, namely, the concept of experience. Only they treat it from different points of view.

But the world is not merely an aggregate of experiences. In it determinate functions assert themselves, and the knowledge of this functional relation is a knowledge of Reality. The distinction between idealism and realism is, theoretically regarded, indifferent. We apply the name sensations to the elements of existence, when we treat them as elements of a psychical world. The task of science consists only in the discovery of the regular coherence of all events; of necessity, therefore, it leads to a monism.

Perhaps in this Mach passes far too lightly over great difficulties. The "elements," common to physics and psychology, appear as something indeterminate and

mystical, as a nebulous mass which has not taken on any configuration or articulation. To be sure, the distinction between physics and psychology springs from a division of labour, which has been recognised as profitable. But such a division is not easy to repeal; it has a "prejudicial" character, which produces contradiction so long as determinate experiences produce no new intellectual adaptation to necessity. Even the fact that the division of labour has been recognised as necessary and expedient points to cosmological conditions. Existence can hardly be so simple as Mach supposes, if various points of view are necessary in order to understand it. Monism must struggle for the victory with greater opponents than those which Mach recognises.

Add to this, that the relation between the elements and their functional relations appears uncertain. It can hardly be indifferent to the elements whether they must remain in just these determinate relations, and conversely the relations are determined by the elements for which they are valid. In what, then, does Reality consist? In the functional relations, pure and simple, it cannot consist. A whole range of questions here arises, as to how the particulars stand to the whole in which they cohere; questions, the answering of which is of importance for all philosophy.

That Mach did not pursue the problem so far does not diminish the value of his work, which has been in a high degree stimulating and fruitful, and appears to be rejoicing in increasing attention.

(3) In his epistemological ideas, Heinrich Hertz (born 1857, in Hamburg, died 1894, as Professor of Physics, at Bonn) joins company with Mach. The talented scientist, so early distinguished, made himself especially

famous by his experimental demonstration of the identity of electricity and light, a demonstration which confirmed Orsted's presentiment, Faraday's ideas, and Maxwell's computations. In an address to the *Kongress deutscher Naturforscher* (1889), he set out his demonstration in a clearer and more accessible form (*Über die Beziehungen zwischen Licht und Elektrizität*). Helmholtz, his teacher, has given, in the preface to the third volume of Hertz's writings, a sketch of the eminent scientist, and of the course of his scientific development. Here we have to do only with the way in which Hertz came by the fundamental principles of his science, and also to the character which he ascribes to the work of knowledge. On this point he expressed himself in a clear and thoughtful paragraph of the introduction to his *Prinzipien der Mechanik* (Werke, iii.).

It is the task of science to deduce the future from the past. In order to be able to do this, we figure to ourselves a type or symbol of such a quality, that its intellectually necessary consequences always represent the consequences of the corresponding objects necessary in the course of nature. Experience shows that this is possible; and this points to an agreement between nature and our minds. But we must realise that our images are to be regarded as coincident with reality only relatively, *i.e.* in the agreement between thought-necessity and natural necessity. Whether they coincide with it otherwise we cannot experience.

If it is possible to frame several images, equally logical and consequently applicable, we accord preference to the simplest. To be sure, it is not possible, since the nature of our own minds comes out in the images we form to exclude unnecessary and inapplicable elements.

The simplicity can always be greater, and the applicability has always to be verified anew. It cannot be shown that nature itself must take the simplest path. For his presentation of mechanics Hertz believes that he stands in need of no other symbols than Time, Space, and Mass, considering notions like "Force" (energy) and "Atom" superfluous. We can observe neither force nor atom. We see always masses in motion. Now what we see offers no complete regularity, and no full coherence. We must, therefore, assume that the multiplicity of the real world is greater than the multiplicity of that world which unfolds itself to our senses. If we wish to have a finished and regular idea of the world, we must conjecture things invisible, behind the things which we see, and different from them. The simplest way is, then, to form an idea of this hidden region as consisting in masses in motion, being distinguished from the visible masses only by the fact that they are inaccessible to our senses, and our customary means of perception. We only speak of energy when it is a question of defining the mutual relations of two motions. By energy we understand partly the cause, and partly the effect of a motion. Energy is thus a derivative concept. The concept of the "Atom," too, is a pure abstraction. The given is always a material system only, never an individual substance.—

It must evidently be left to mechanics to decide whether it can rest satisfied with the presuppositions with which Hertz stops. We are interested in this place to see how a distinguished scientist has sought to explain his intellectual work. That this explanation has been determined by his own special field of work, cannot, indeed, be denied. Hertz's great achievement consists

in the demonstration that electrical oscillations evince exactly the same relations as the rays of light or heat, so that many more motions must take place in space than those which our senses directly reveal to us. Thus it is natural that in Hertz's imagination invisible masses and motions should have a leading part to play. In this connection he had a great predecessor in Faraday, who had already endeavoured to exclude everything impalpable, and so doubted the reality of empty space, and of action from a distance. Whether it is possible entirely to exclude the conception of force (*i.e.* of energy) may be open to doubt; really, Hertz is willing only to reduce it to a subordinate, derivative conception. Perhaps he would have arrived at another view of the matter had he applied himself more closely to the causal problem. He puts forward the causal principle only as a necessary presumption, under the form of the basic assumption that settled and regular relations subsist between the various circumstances of the material system. The causal problem is only propounded sharply and pertinently, when we stop with a particular survey, in which the preceding circumstances are about to vanish, while the succeeding have not yet arisen. Here the concept of force signifies an expectation of what is going to happen, a confidence that the future will be regularly connected with the past. Hertz himself says, too, that we speak of force *while* the process, by means of which we deduce future from past experiences, is taking place (*Einleitung*, p. 14). In a certain sense, our whole life is in such surveys, and the "ancillary concept" is continually needed; the more so, indeed, the more intensive is intellectual labour.³⁴

Hertz is distinguished from Mach in that he lays

stronger emphasis on the symbolic than on the economic side of our concepts. It is the impulse after visual representations that asserts itself most strongly with him ; and his perfect readiness to do without concepts like " force " and " atom " rests, perhaps, on the fact that they render possible no clear perceptions. Either Hertz was a decided visualist, or it was for him a determining factor that visual symbols take precedence of motor (muscular), in allowing of direct measurement. Force is a symbol, which is referred back to the experience of muscular adaptation ; and this last can only be measured by the motion which it sets up.³⁵

It appears to me in the highest degree interesting, that Hertz's definition of the truth of scientific symbols agrees closely with the only definition that can be given of the truth of our sense qualities. His teacher, Helmholtz, in his *Physiologische Optik* (§ 26), has enunciated it in the following words : " In so far as the quality of our sensation indicates to us the peculiarity of the external influence through which it is aroused, it can stand as an indication but not as a copy of it. . . . An indication need be in no way similar to that which it indicates. The relation between the two reduces itself to this, that a similar object, coming into action under similar circumstances, calls up a similar indication. We call our ideas of the external world *true*, when they give us sufficient information about the consequences of our actions throughout the external world, and bring us to proper conclusions regarding its expected changes." ³⁶

(4) In peculiar contrast to Hertz, stands *Wilhelm Ostwald*, the well-known chemist. He endeavours to make energy, the concept of which Hertz wishes to expunge, the basic concept. It would be interesting to

know whether Ostwald is not a motorist in the same way as Hertz appears to be a visualist. But their opposition may also proceed from their methods of study; for the chemist has greater occasion than the physicist to think in terms of energy, while it is more likely to be the case that the physicist will follow out visual schemata than it is with the chemist. The latter looks upon them as sealed with hypothesis.

Ostwald (born 1853, since 1887 Professor of Chemistry at Leipzig) contends against all materialism, wishing to reduce all matter to energy. This thought becomes noticeable for the first time in his address to the Kongresse deutscher Naturforscher (1895) ("Die Überwindung des wissenschaftlichen Materialismus"), and is developed at large in his *Naturphilosophie* (1902), which is dedicated to Mach. Ostwald endeavoured to do more for the discussion of those questions that inhabit the borderland between natural science and philosophy, in founding a new publication, *Annalen der Naturphilosophie*.

All is energy, and there exists nothing but energy! That is Ostwald's leading principle. All qualities of matter can be analysed into energy. Mass is the capacity for motor energy; space is filled by volume-energy; weight is a certain kind of local energy; chemical qualities are varieties of the energy that comes out in the transformation of substances. Energy is work, or all that arises out of work, or is converted into work. This concept is the most comprehensive that science has ever produced. It comprehends both substantiality and causality. If by substance we understand the existent, energy is the true substance. It streams forth from the sun over the earth; it is immedi-

ately applied, or stored up as chemical energy, for later use in the active process of life.

We feel ourselves induced to frame concepts like "matter" and "body" only when connections of various energies bring about a composite state of equilibrium. If something is to happen, differences of vigour in different energies must be posited. In fact, there are only approximations to complete equilibrium. The principle of the preservation of matter or of material elements shows only that the elements can be called out afresh, after having produced any compound.

It being Ostwald's purpose to propound a philosophy of nature, and not only a theory of knowledge, he endeavours to bring conscious life under the same point of view as that from which he treats the whole of organic and inorganic nature. In his view even consciousness is energy. Our cogitating all externals as energy finds its explanation in the very fact that all conscious processes are of the nature of energy. Ostwald seeks to demonstrate this by an investigation of attention, memory, comparison, and will. He refers to the position so strongly urged by Kant, that consciousness is by nature synthetic. In this it is stated that all psychological experiences, seeing that they arise in the same brain or mind, stand in inner coherence with one another. The energy of consciousness is expressed in this coherence. Since our ideas of the external world are determined by the nature of our consciousness, it is no wonder that they bear a stamp similar to that of consciousness itself. The significance of conscious phenomena consists in the fact that they render possible the collation of experiences, so that earlier experiences can be utilised for comparison with recent.

In this way Ostwald believes that he has solved the problem of the relationship between the physical and the psychical. But, when he defines mental energy as unconscious *and* conscious nervous energy, it is clear that the problem will always be reappearing in its entirety, for the question now is, how the passage takes place from unconscious to conscious nervous energy. It boots not to answer that it takes place by way of attention, for it is presupposed that this is bound up with consciousness, so that we are travelling in a circle ; but without this presupposition, it is not easy to understand how consciousness can arise through the mutual reaction of two unconscious processes. The concept of nervous energy appears to be, with Ostwald, purely mystical.

This connects with the fact that Ostwald's doctrine of energy relies above all upon experience drawn from the external world. He defines energy as that which follows from work and is dispensed in work. Work, which is here the matter under discussion, consists, however, in the overcoming of opposition to a motion. Only apparently, then, can Ostwald exclude geometrical qualities from his concept of energy, for they are just as original as purely dynamic qualities. Mass and energy are correlative concepts, which must be mutually determined. We know mass as the constant relation between energy and acceleration, and energy we know when we presuppose mass and acceleration as known. We learn acceleration by measuring temporal and spatial relations. Thus we do not reach the concept of physical energy over the corpse of space. As little as Hertz and Mach could exclude the concept of force, could Ostwald exclude that of matter. Up to the

present it has been neither his fortune, nor that of any other, to propound a concept of energy, able to form the basis of both psychical energy, which is expressed in the composition and separation of conscious elements, and of physical energy, expressed by the overcoming of an opposition in space.

II

THE NATURAL HISTORY OF PROBLEMS

RICHARD AVENARIUS pursued the philosophical path to an apprehension of knowledge akin to that at which Maxwell and Hertz arrived by reflection on the principles of their science, and which Mach attained through the study of the history of natural science.

Avenarius (born 1843) was a student at Leipzig, where he was introduced by the physiologist, Ludwig, to the strictly mechanical view of nature, in its application to organic phenomena, and by the philosopher Drobisch to the Herbartian philosophy with the doctrine of ideas as expressions of the need of self-preservation of the soul. The study of Spinoza was vastly important for him, for it brought him into contact with the sublime endeavour, to refer all thought, strictly systematically, to a single thought. His first work treats of Spinoza's philosophy (*Über den beiden ersten Phasen des Spinozischen Pantheismus*, 1868). This is a shrewd attempt to show how Spinoza's system arose through the amalgamation of three disparate lines of thought; a religious, expressed in the concept of God, a scientific, in that of nature, and an abstractly metaphysical, in that of substance. The three concepts had, with Spinoza, finally expressed one and the same thing (*Deus = natura =*

substantia). The reduction of the organic to the mechanical, the notion of ideas as the expression of self-preservation, and the study of the most far-reaching attempt at a doctrine of identity, prepared Avenarius for the view of knowledge which he first expressed in his *Philosophie als Denken der Welt gemäss dem Prinzip des kleinsten Kraftmasses. Prolegomena zu einer Kritik der reinen Erfahrung* (1876). In this he starts from the fact that the power of ideation at the disposal of consciousness is not infinite; it must consequently practise economy in its thinking. Now it endeavours to refer the unknown back to the known. This happens in all recognition and in all conception. In general, it strives to reduce disparity and multiplicity to the simplest possible terms. Philosophy is just the scientific effort to think the summary of the empirically given with the smallest possible application of force. It endeavours, by excluding from knowledge all those ideas that are not included in the given, to attain a pure experience; only when this has been reached is no more force applied to the cogitation of the given, than the given itself requires.

In 1877, Avenarius became Professor of Philosophy at Zürich, and here he worked out his masterpiece, *Kritik der reinen Erfahrung* (1880-90). This is a treatment which endeavours to demonstrate, along the paths of pure biology and psychology, the conditions of the rise and disappearance of the problem. Avenarius confronts his problem from the standpoint of the psychological experimenter or from that of the mental physician, so as to study it purely through natural history. He believes that it is possible, by the continual purification of all elements not included in the given, to constitute a

continuous approximation to "pure experience." This is an approximation to a purely empirical world-concept. How such a world-concept would come about he develops in his book, *Der menschliche Weltbegriff* (1891), which amplifies his great work especially in its endeavour to find the ground of the "impurity" of experience in animism, and, in general, in the need of apprehending things on the analogy of ourselves.

Avenarius' work is the result of earnest thought, and relies on a sufficiency of observation and examples. But he injures its efficacy by the introduction of an artificial and needless terminology, which frightens many readers. There is something of tragedy in the fact that his illuminating labour of thought loses merited recognition in wider fields for this reason. Ardent devotion to study shattered his health. In vain he sought alleviation in health resorts, *e.g.* at Shodsborg, near Copenhagen, where I, having already made his acquaintance in Zürich, was first initiated by him into "pure experience" during walks in the Tiergarten. A few years later he died (1896). Universal vivacity of thought, accompanied by artistic interest, and a frank, mild disposition, are the leading traits of the picture which all who came into personal relation with him carry in their memory.

In treating of Avenarius' philosophy, I will not follow his own arrangement or use his terminology. By reiterated study of his chief work, it has become clear to me that his basic thoughts can be presented in a simpler manner than he employed, and that they can only come fully to their own in this way.

Avenarius' aim is to give the natural history of problems; for he seeks to show physiologically, psycho-

logically, and historically, under what conditions they arise, are brought to issue, are solved, or disappear. Material for these inquiries can be drawn from all quarters ; for the child, the savage, the practical man, the disciple of religion, have their problems just as much as the man of science or the philosopher. All are here on a level, for it is a question of something that is a consequence of natural, universal human relations. The distinction is only that the scientific setting and solving of problems approaches nearer to pure experience, *i.e.* the restoration of the given without subjective admixture.

A problem is always, where it can arise, the mark of a relation of strain between the individual and his environment. This stress arises out of the fact that stimuli, coming from the environment, can claim either greater or less energy than is at the disposal of the individual. If stimulus (*Reizung*, R) and energy (*Energie*, E) are throughout correspondent (which may be expressed, $R = E$), we have the highest grade of self-preservation (*Vitale Erhaltungsmaximum*). A recognition of the environment takes place. The individual feels himself indigenous ; he trusts his perceptions and ideas. If now the changes of the environment demand fresh and increased effort on the part of the individual, without an increase of energy, or a change in the manner of its application, a problem arises. (This may be expressed, $R > E$.) The individual finds anomalies, exceptions and contradictions in the given. This appears as "something other" than before, perhaps as "something wonderful." A recognition is, for a time, impossible. Every genuine problem is a sort of homesickness, and releases an endeavour to annul the strange-

ness. With the increase of culture, production, and knowledge, the possibility of such strangeness increases. If, on the other hand, energy increases more strongly than stimulus, without decrease of the latter (which may be expressed $E > R$), a problem arises on the opposite grounds. It is then a matter of applying energy. This will then be free, released in unwonted directions, which are not altogether determined by the given. Far-reaching enterprises are undertaken, danger and disaster are sought out. This will be a time of emancipation, or of storm and stress—in general, a time of practical idealism. On the latter form, Avenarius dwells but scantily. He could have adduced Rousseau and other “subjective” thinkers as his predecessors. Hume has laid great stress on this point in his psychological epistemology, and we shall see that Guyau and Nietzsche ground their whole philosophy on it.

The relation with which Avenarius especially concerns himself is that in which the stimuli demand other or greater exertion than is in every case suitable, for the time, to the energy of the individual ($R > E$). In the closer investigation of the consequences of this relation Avenarius takes it as the most scientific, which for him means most nearly approaching pure experience to establish a physiological method of treatment, and so to treat the processes set up by propounding the problem as processes in the central nervous system. The individual's pronouncement as to his situation during the setting, handling, and solving of the problem is now to be taken as a symptom of what is going on in the central nervous system. We have two series (*Vitalreihen*), a subjective, the situation of the individual, expressed in his statement, and an objective, the changes in the

central nervous system. The former is a mathematical function of the latter, on which account the subjective series may be called the dependent, the objective, the independent, vital series. The objective series is called independent only on the ground of convenience. In and for itself one could invert the relation of the two vital series; and Avenarius expresses his definitive standpoint in a verbal statement: "I know neither physical nor psychical, but only a third." Yet, on more precise information, it is recognised to be an illusion to believe that the objective vital series is fundamental. The first volume of his work is to deal with this, the second with the subjective series. The treatment in the first volume is peculiar in that no special examples are to be found; such come out only in the second volume, and are universally "subjective" in nature. The greater richness of facts thus discovers itself in the subjective series, and of the objective series only a very dry and purely schematic treatment can be given. This dry schema is only understandable into the bargain when we seek out its psychical correlatives. This circumstance is typical of the relation between psychology and physiology, and includes a premonition of the view that we reach a higher degree of science if we proclaim the "biological" method to be the only proper one for the treatment of such questions as these.³⁷

A vital series is a process by means of which a new equilibrium is set up, after an earlier state of equilibrium has been annulled by the rise of a problem. This has three stages, which we (confining ourselves to the subjective series) may call stress, work, and release. The first stage can further express itself in various ways: as lack and longing, as desire, as doubt, as fear, pain,

repentance, or delusion. We must consider that it is here a question of the problems and stresses of the practical life just as much as of the life of pure theory. The second stage can appear as action or effort, as struggle or regular activity, as a venture in which the personality is at stake, or as a patient unravelling of conditions, in order to solve a difficulty. The third stage is the time of victorious feeling and enjoyment.

The third stage (solution, deproblematization) can be reached in various ways. If the stress be one of small import it can be annulled by restitution, for either a change takes place once more in the environment, by which the earlier circumstances enter again, or the individual undertakes a momentary adaptation. If the strain be greater a substitution must take place, be it by the aid of habit or practice, or the evolution of new circumstances and capacities. The complete solution demands the evolution of functions corresponding to the constant and universal in the relations which the environment may offer, so that the individual may be from thenceforward independent of the most essential variations. By restitution, homesickness leads back to the old home; by substitution, it urges the erection of a new home. This solution can be purely individual (*e.g.* in a view of life held only by the particular personality); but it can also be social (*e.g.* in a public religion) or universal (*e.g.* in science). Formal logic contains forms, under which, as experience has shown, vital series can attain universal solutions. Variations are here reduced to the smallest possible compass, and the so-called principle of identity itself offers only a claim to such a reduction, and so a "heterotic minimum," *i.e.* the smallest possible variety of the content of experience

is attained. Those elements must be weeded out which have only individual and transitory significance, and spring from heredity and tradition, while those must be retained that find continual application. Let us call the former elements α the latter a . Then the matter stands thus: in $y=f(a, \alpha)$, $\alpha=0$. Thus the individual or social solution passes over into the universal, and we approach pure experience, and this the more as we put forward more observation and the more we think them out. Finally, those elements only will be logically tenable which have universal significance (*i.e.* a , but not α).

But there is a distinction between logical and biological tenability. It may happen that individuals, peoples, and ages cannot do without certain ideas, although they do not possess universal validity (those decidedly in class α , that is to say, not in class a). And so there will be "safeguards" (*Schutzformen*), which elude the control of experience. Here belong many elements of individual views of life, of public religion, of philosophical systems, and of the hypotheses and principles of natural science. Such safeguards are naturally not immutable; the biologically indispensable will naturally vary with the circumstances. Perhaps their justification rests on their indispensability; their validity is there "postulated."

What is a problem to one is not always such to his neighbour, either because the latter believes that he possesses a solution, or because the circumstances which propound the problem do not touch him; and what is a problem to one is perhaps nothing less than a solution for his neighbour (*e.g.* creation out of nothing). The purely subjective symptom (certainty, self-evidence) does not

guarantee the attainment of a real solution (*eine absolute Deproblematisierung*), and the entry of no fresh setting of problems (*Problematisierung*). Fresh vital series can always be annulled, until continually recurring stimuli lead to the complete severance of unnecessary and untenable by-thoughts (*a*), so that neither other nor more energy is annulled than is just necessary (*a*). An unremitting process of weeding out takes place, and by its means we approach a heterotic minimum. The standpoint of pure experience is characterised by the fact that knowledge consists essentially in description, which uses so far as possible quantitative and not qualitative determinations, since it always demonstrates equivalence, and deduces the consequent from the antecedent. In practical relations an analogous development goes on, for it appears that the most stable social life is that in which social differences are minimised as far as possible. Thus it becomes possible for the particular parts of society to maintain themselves—not at the cost of others, but just in virtue of working for their preservation.

Avenarius himself admits that we can only approximate to pure experience. He certainly should have been far more emphatic on this approximation. His view of the problem would have been more productive if he had. For it would seem that he imputes it to us as a fault that we do not stand at the view-point of pure experience; and this cannot be any blame to us, for this standpoint can never be fully attained. Pure experience is for Avenarius what the pure idea was for Plato. Our real knowledge is always in the effort to attain the pure idea or pure experience. But we must go a step further. Can even pure experience do without

ancillary concepts (*a*) and still remain experience? Yet we cannot unify the "environment." It still goes on to envelop us, be our experience never so "pure" of subjective elements. The distinction between it and us never falls away. Subjective elements are already to hand in the fact that something is *given*. Avenarius calls his task originally an attempt to give a philosophy which shall think the world with the smallest possible application of force; such an attempt, in his opinion, ought to lead to "pure experience." But the economy of thought necessarily leads to symbolism, for it cannot be proved that the economic consideration (the principle of unity) is a principle of purely objective, and not also partly of subjective validity. In any case the principle of the economy of thought does not lead us without more ado to renounce the use of ancillary concepts. One might as well say that there is domestic economy where no fire and no dishes are used. On this point, Avenarius involuntarily differs from the philosopher-scientists already mentioned. They saw the connection of economy and symbolism, although they laid varying degrees of importance on these two aspects of knowledge. Connected with this, also, is the fact that Avenarius takes up a somewhat dogmatic attitude with regard to the relations of physiology and psychology. He does not see that epistemologically we always know "independent vital series" by means of the "dependent." We should have no idea of the central nervous system and its situation if we did not possess the capacity of framing ideas; and we are indebted for our present ideas of the central nervous system to the setting and solution of problems, which do not satisfy the claims of "pure experience."

In yet another connection, Avenarius does not lay proper stress on the fact that we are open to a development, and that the thought of an ideal conclusion can only have significance as a standard for the course and direction of the development. He is preponderantly concerned with the case $R > E$, and so with cases in which the demand for effort comes from without. But it is a condition of the advance of the life—alike of knowledge and of will—that the demand for effort can also arise from within, since there is an overplus of force looking for application ($E > R$). In the whole of nature life begins with such an overplus. This renders growth possible and raises new buds. Just when life exhibits force it oversteps the given, seeks or calls forth new experiences, plants new slips.³⁸ This happens in ventures, but especially where a valuation takes place. Had Avenarius executed his design of writing a *Freiluftethik*, he would certainly have stressed the fact that in all valuing we transcend the mere given. Here subjective elements are least dispensable, even though they must be continually rectified by means of objective criteria. When we come to Guyau and Nietzsche, we shall be concerned with this question.

These critical remarks ought only to conduce to the weeding out of some of the subjective by-thoughts (*a*), which hindered the energetic thinker from getting a clear view of the facts. Without them—and without the terrifying form in which his writings are presented—his eminent idea of a natural history of problems³⁹ would have been quite certain of making a greater impression on the age. This idea will be taken up again, and the pains which he has bestowed upon it will not be lost.

THIRD GROUP
THE PHILOSOPHY OF VALUE

THE PHILOSOPHY OF VALUE

WE may make use of the three relations which Avenarius distinguishes between the inner and outer conditions of knowledge, to specify the distinction between the three groups of philosophical attempts that come to the fore in recent times. The systematic group is really characterised by the fact that it presupposes equilibrium between needs and satisfactions, or between capacity and work ($E=R$). The epistemologico-biological group lays the chief stress on the fact that other and greater claims on our powers may be made than we are able fully to satisfy ($E<R$). The third group, finally, emphasises that there may be an overplus of impulse and capacity ($E>R$), which leads to a valuation of existence, and an aspiration beyond the given. The present-day representatives of the last view fall into two divisions, for Guyau and Nietzsche display inner relationship, and form a contrast to Eucken and James's more objective line of thought. Eucken has a decidedly systematic bent, for it is his conviction that a deep-seated philosophy of life cannot be maintained without the determinate presupposition of an absolute order of things, an "intelligible world." Here discovers itself a point of connection with the speculative idealism of earlier German philosophy, for the revival of which he contends. James has

somewhat more freedom on this point. He stresses personal experience and the necessity of working with a clear horizon, as against both natural and supernatural dogmatism. With regard to the manner in which the individual interprets his need, and the help which he believes that he will find in satisfying it, various tendencies will, in James's opinion, always make themselves felt in Spiritual life.

Since Guyau's and Nietzsche's life and activity are to hand in their entirety, and since the form of their works has given them influence in greater fields than is usual with philosophic labours, I will give a more exhaustive treatment of these thinkers.

Both Guyau and Nietzsche take their stand on the evolution theory, and hope for the rise of new forms of life. This hope they rest upon the force and wholesomeness of life—on the conviction that there is an overflowing plenitude of energy, which does not attain expression, and does not flow away, in our present experience, and our present vital relations. They oppose a mighty Yea to the Nay of Pessimism—the one with hearty feeling and mild resignation in the vicissitudes and transitoriness of value, the other in defiance and scorn of the past, and with intractable, finally spasmodic, hopes for the future.

A leading problem for both is the relation between instinct and reflection, between the unarticulated energy of life in its earlier stages, and its articulated activity during the advance of culture and reflection. Since this problem was taken up by Rousseau, Lessing, and Kant, towards the end of the eighteenth century, it has been advanced by no others so strongly as by the two authors with whom we are here concerned. Both are foes of

one-sided intellectualism, and rely on the life of feeling and volition, which cannot ever be set forth in completely clear and rational form. While it is possible, with the other group, that the externally given sufficiency may threaten to overcome thought, it is here a fullness from within, arising out of the inner world of feeling, that drives thought to its limits.

Connected with this is the fact that their treatment stands on the boundary between philosophy and poetry. Disposition and passion are in all points conjoined, not always to the use and profit of the clarity and consequence of the inquiry, but very much to the advantage of the literary and even agitating function which their writings exercise. Their thoughts have a greater measure of significance as symptoms of what is dominant in the sentiments most affected in present-day life, than as contributions to the treatment of problems. This is especially true of Nietzsche.

There is only one other point of similarity. Both are invalids; and their thoughts and works have been produced in great measure in continuous struggle against illness. This is not a decisive factor for the valuation of their thought. There might indeed be thoughts which cast light upon life, which could only arise under just such conditions. The borderland between sickness and health might be very particularly fruitful. And so we must, before all things, look for the significance and validity of their thought, and only after we have put these to the proof can we employ what we know of their individual conditions to explain their bent of mind.

I

JEAN MARIE GUYAU

GUYAU is an example of early maturity. When but a youth of twenty (he was born in 1854) he won the prize of the French Academy of Science for a history of Utilitarianism from Epicurus to the present day. His first studies he devoted more particularly to Plato and Kant; at the same time he was strongly influenced by his step-father Fouillée. His brilliant capacity of presentation and his searching criticism directed attention to his work, and won for it the recognition even of men who were strongly criticised in it, *e.g.* Spencer. As his studies proceeded, he came somewhat nearer to the views which he attacked, and not infrequently he was hard put to it to escape objections which he himself had put forward as against the English school. He concerned himself especially with the problems of aesthetics, ethics, and the philosophy of religion. Rankling doubts of the significance of our values for existence pursue him since his youth, and find expression not only in his philosophical writings but also in his poems (*Vers d'un philosophe*). His original Platonic belief in rationality faded away under the joint influence of reflection and chest-complaint. Although later on he once more held the possibility of the ideal significance of life, he yet had

a philosophical eye for the difficulties of the problem. The clarity of his thought, accompanying as it does a fervent disposition, has been called a mark of his French temperament. He is aware that many of his ideas and hopes are illusory ; but he holds fast to them, if only they are fruitful illusions, which can bring thought and will to energetic exercise (the poem " *Illusion féconde* "). He has, in an advanced stage of illness, death clearly before his eyes, but he wishes to inspire his last song (" *La Cicade* ") with all his love for mankind. There is hardly any other author who could have such cordiality and loftiness in his life as he has displayed, even when all dogmas are treated as illusory. Otherwise—illness apart—he lived in happy circumstances. Researching and composing, loving and beloved, he approached his end with the full consciousness that it would be his release from sickness. He died in 1888 at Mentone. His tombstone bears the following lines from one of his works : " Our loftiest efforts seem to be just those that are the most bootless ; but they are like waves, which, being able to reach us, are able to reach yet further also. I am convinced that my greatest possession will outlive myself. Nay, perchance not a single one of my dreams is to be accounted lost. Others will take them up, be they only night-fantasies to me, until one day they journey to their complete perfection. The sea owes it to the waves ever dying within it, that it has power to fashion for itself the shore and the vasty bed of ocean where it moves."

A. CRITIQUE OF ENGLISH ETHICS

(*La Morale anglaise contemporaine*, 1879.)

Already in Guyau's critical work we find premonitions of his definitive attitude. There are three objections in particular which he advances against the ethics of the English school.

The English teach that morality springs essentially from prudent calculation (Bentham), or from the association of ideas (Hartley, the two Mills), or from natural selection (Darwin), or from adaptation to vital relations (Spencer). They base the validity and maintenance of morality on certain inner and outer evolutionary relations. The moral feeling is a natural phenomenon, which man treats as an objective power, only because he does not see how it arose. The involuntary and unconscious growth of the moral feeling is the chief object of English ethics. Here in Guyau's view it gets entangled in a contradiction, and works in opposition to itself. For even these English theories must open man's eyes, and show him how it stands with the nature of this mysterious moral feeling. It looks like an avoidable deception. Reflection will dissolve what has framed purely spontaneously.

But—has there been a real development? The English presuppose as their ultimate basis the egoistic need of self-preservation, and does this not always remain the same, even though such a mob of calculations, associations and adaptations be added to it? But this does not mean that disinterested sympathy is an original tendency. What the English read as primitive egoism is, according to Guyau, something other and something more, which lies deeper than either egoism or sympathy.

This is an impulse to activity, an unfolding and amplification, which dominates wherever life is sound and strong. This impulse need not be directed against others, but can, on the contrary, lead to connection with others, and to work for them. Thus, not only through many connecting links but even in its earliest germ, the human impulse contains the possibility of devotion to a life more comprehensive than the purely individual. Guyau is here developing a thought which had already appeared in Vauvenargues and Rousseau, though he seems not to have borrowed it from them.

If stress be laid on the inner impulse to action and development, which is in some measure independent of external occasion, our effort has not—as the utilitarian must conclude—the character of a mere means. Then it may be that we live to will and to act, and not the reverse (“Il faut vivre pour vouloir et agir!”). The present is a creation neither of the future nor of the past. There is an end in the voluntary act itself (“Il y a dans la volonté quelque chose de définitif!”).

B. ETHICS

(*Esquisse d'une morale sans obligation ni sanction*, 1885.)

Guyau bases his ethics on the concept of life in the widest sense of the word, according to which the opposition between the conscious and the unconscious, like that between egoism and sympathy, disappears. Life is expressed as a need of growth, of preservation, of reproduction, of amplification. By means of biology Guyau will remedy the difficulties in which the English have become entangled on account of their psychological basis. Still he admits that Darwin and Spencer

have really demonstrated a biological ground. It is for him a leading fact that ends are not ultimately produced by consciousness, though it sets up ends for itself. The process consists only in consciousness of or opposition to that which has already asserted itself unconsciously. Thus, ends are not entirely external.

Hence ethics is the doctrine of the means with the help of which the end proposed by nature itself—the increase and preservation of life—can be reached. The main ethical commandment is : “ Develop thy life in all directions. Be as rich as possible, both as regards the fervour and the compass of thy endeavours. Consequently—live in community with others, and bring out thy capacity so as to live in the greatest possible community with them.” Duty is only an overflow of life, which demands to be used and added. It does not arise out of compulsion and external necessity, but is the expression of a force. In sympathy or altruism this overflowing force comes out especially. Egoism is, on the contrary, the sign of a contraction, an isolation, and last, but not least, depends in the long run on an illusion. The highest virtue, and, withal, the deepest grounded in nature, is high-mindedness (*la générosité*).

Guyau seeks to avoid the criticism which he himself has levelled against the English, by going back to the unconscious and the involuntary. He overlooks, meanwhile, the manifold possibilities—and so the manifold problems—concomitant with the passage from the unconscious to the conscious, from the spontaneous to the voluntary. It is not said that the conscious altogether exhausts the unconscious, or that it altogether corresponds to it ; and so with the voluntary and the spontaneous. Means presuppose an end, and ethics cannot

seek a means without knowing what end it is to subserve. What we make an end depends, further, on what we consider worthy. Indirect values (the means) presuppose direct values. Consequently we must start with the latter, and without the aid of psychology they cannot be discovered. An empirical doctrine of values must provide the basis, and if there be more fundamental values, which cannot be reduced to one, a difficulty arises for all ethics at the very beginning. Only so long as we deal in vague generalities does an appeal to biology satisfy. So soon as determinate questions are propounded the concept of value springs into prominence. Guyau cites himself as an example of this. Guyau maintains, as against Bourget's contention, that it is arbitrary and dogmatic to distinguish between natural and unnatural feelings and impulses, that there may very well be a distinction of values even if the various circumstances originate with equally great necessity (*L'Art au point de vue sociologique*, p. 375). There is a criterion of natural value (*valeur naturelle*) which must be sought in the force and extension of life as well as in consciousness and the feeling of pleasure, which are its inner manifestations. Yet it is evident that if life—no matter how forceful and comprehensive it might be—were not bound up with “consciousness and the feeling of pleasure,” no value concept could be advanced, and no ethical discussion would be possible.⁴⁰

The need which is satisfied by the increase in the force and comprehensiveness of life, is, however, spontaneous and instinctive; is it not then enfeebled if it be brought forward as the object of attention and reflection? This was the main difficulty which Guyau had found in the English, and of which, consequently, he had

to endeavour to free his own system. He is of opinion that reason paralyses instinct only when it proceeds in another direction than the latter, or when it is of advantage to replace it. But neither of these is here the case. Spontaneous devotion and development have a great practical importance. The pleasure of venture arises out of the surplus vital force, which arouses hope and belief, and so renders possible that which would otherwise be impossible. This power and healthiness of life is expressed in bold movements of thought, in enthusiastic sacrifice. The only sanction which the ethics of the future can recognise is the pleasure of venturing (*le plaisir de risque*). I do not see why the English could not equally well appeal to these grounds; as a matter of fact they do, and this even more than Guyau, in that their ethics is more empirical. If prudence, association, and adaptation could not lead to something valuable, they would not form the roads along which evolution ever advances. Moreover, if reflection tends to dissolve the instinct, will it not also check the expansion?

C. AESTHETICS

(*Les Problèmes de l'esthétique contemporaine*, 1884.)

Guyau's aesthetic offers an interesting example of how a problem may be put in various ways, conformably to the circumstances of various times. To earlier inquirers, like Kant and Schiller, and much later even to Spencer, the task appeared to be to make room for art in the midst and in spite of the battle of life. They had recourse to the same thought that plays such a great part with Guyau. They referred to the utility of an overplus of

energy for functions similar to those to which energy is applied in the life struggle, even though they assert themselves only in imitation and play, not in the reality of life. As against this whole tendency in aesthetic, Guyau says, "We seek in art nothing but a richer and a fuller life than the customary situation of life is able to produce; art is an amplification of life, only, unfortunately, we have to call in the aid of imitation and play in order to reach it. The unreal is by no means a condition of artistic beauty, but properly a limit with which it has to put up. From the artistic attitude arises the wish to become that which we contemplate, and it is the poet's trouble that he cannot make himself one with the whole fullness of life" (the poem, "Le Mal du Poète"). Consequently, in Guyau's view, natural beauty stands higher than artistic beauty.

Connected with this is Guyau's contention that all senses co-operate towards the beautiful. A draught of milk in a dairy can act as a whole pastoral symphony. All sides of our being are involved—through sense, memory, fancy. Guyau calls an influence beautiful which excites feeling, thought and will together, and awakens pleasure in this collective activity. All delight and all pleasure will be more and more stamped with beauty, so that the distinction which would make a half-way house between the pleasant and the beautiful will fall to the ground; this distinction is conditioned only by the fact that the animal still has so great power in man. Aesthetics and ethics are made to agree with each other in the assertion of the natural value of life. Eventually it will be shown that no artist merely as such is able to portray anything other than his own life—and the value of his work will depend on the value

of this life. The reader of Guyau cannot help reflecting that this turn of thought can be applied to Guyau's own literary activity, which is everywhere penetrated by the mighty Eros which was the soul of his life.

D. PHILOSOPHY OF RELIGION

(*L'Irreligion de l'avenir*, 1887.)

Guyau's most noteworthy and illuminating book is that which considers the irreligion of the future. It displays a fortunate combination of the most searching criticism and the most fervent sentiment, together with the full conviction that the time of religion has gone by, and with the sure and certain hope that a lofty and ideal view of life will never lack the conditions which its evolution requires. His title is directed against the attempt to construct a religion of the future; and at the same time against "anti-religion." The book maintains the inner coherence of the religious attitude with the attitude which is supposed to succeed it.

The religious problem is, according to Guyau, intimately connected with the ethical and the aesthetic. All three regions, in his view, enter together into the concept of life. In the construction of personal and social life, all three elements come out, and only thus does each get justice for itself. Religion really begins as a sort of mythological physics; but intellectual elements are not preponderant. The basis is provided by the experiences of man in the common life which he lives. This community of life he involuntarily extends over all existence, so that gods and men form a single great society. Religion is not only anthropomorphism, but also essentially sociomorphism. The variety of religions

depends especially upon what sort of society man thinks the universe to be, whether a family or a kingdom—and, in the latter case, whether ruled by a father or a tyrant. The social character of religion is expressed most decidedly in the cult by means of which man discovers his community with the gods. Gradually both religious worship and religious ideas become sublime and idealised. The more personal cults tend to do away with the more external, and mythology yields the palm to mysticism. The summit is reached when God appears as the personified moral ideal. As essential traits of all religion, Guyau cites the mythological explanation of nature, which in the higher religions is advanced to the belief in miracles—a region of dogmas taken as absolutely true—and the cult as a sphere of action with supernatural effects. Where these three things are not met with, Guyau will not speak of religion.

The dissolution of a religion does not take place directly, and from the outside, but through the failure of its inner vital conditions. This happens slowly, after the development of industry, science, individualism, and independent ethics. Among these factors, Guyau lays stress on the independent individual conviction. It is pre-eminently this factor that has secured the victory of one religion over another. This will lead finally to the gradual dissolution of every dogmatic system, and eventually to the supersession of religion. This process of dissolution may last a long time, but ideas work unremittingly and unnoticed; they keep moving, even if, like weary soldiers, they sometimes sleep on the march.

But irreligion (*l'absence finale de religion*) is not, like anti-religion, the complete opposite of religion. It

ought, on the contrary, to become a higher grade of religion and civilisation, since the best of the religious life will, after the fall of dogma, grow in power and comprehensiveness. The eternal in religion is just the endeavour by which it is set up—the impulse to win beyond the bare facts and to discover a greater coherence. The human spirit is like the swallow ; its long wings are not fitted for skimming the earth but rather for high and bold flights into free air ; it merely depends whether it is capable of rising from the ground, and this is often difficult ; but its imperishable aspirations after the ideal will always supply air to support the spirit in its flight. This aspiration will assert itself more strongly than before when separated from religion. Only the need will be less imperatively felt of finding a determinate language in which the eternal riddle can be expressed ; it will speak for itself. Ultimate hypotheses will always bear the stamp of an individual character. No religion is capable of expressing everything that the particular personality in its complete peculiarity includes or stands in need of. Each must set up his own God or his own Bible. Diverse convictions can exist side by side among men, just as various plants can prosper in the same soil. The ethical elements of religion in particular will be preserved and liberated. Even as it is religion tends with the noblest of mankind to become one with love. The disposition towards life and existence will not be simple and constant ; it will change and grow. Evolution already dates from eternity, and after all there is still only a world like this, with all its discord and the insecurity of its course ! The more man lives himself into existence as a whole by means of a sort of ideal sociology, the more his grief will increase. Thought is

not only light but sorrow. God Himself must, if He exists, feel the greatest pain, for He, as an eternal being, must feel most bitterly His inability to mend matters. But the whole disposition will be impressed with sublimity, so that the misery of striving is only an element of the feeling of life. The superfluity of power will arouse hope, belief, and the joy of growth. Even in death, "the greatest novelty of the intellectual life after birth," the striver stands with imperturbable intellectual constancy ("Notre dernière douleur reste ainsi notre dernière curiosité!").

The last expression is characteristic of Guyau's indefatigable intellectual activity, which went hand in hand with a profound earnestness, a melancholy disposition, and a great resignation. It has been said of him that he sailed over the boundless sea without ever casting anchor. But can we cast anchor once for all? As to the religious problem there are few who have delved so deeply as he. He grants freely the necessity of the question whether the concentration of life which the religions in their classical times required, can be overthrown without being compensated by equivalents. It was his endeavour in this to maintain continuity in the sphere of spiritual value, although he was of opinion that the concept of religion was valid for this value only when it appeared in a certain definite form.⁴¹ In any case he emphasises the continuity between religion and irreligion so strongly that the best elements of religion (at the same time, too, what has been the peculiar tendency in its rise) must remain as part of irreligion.

II

FRIEDRICH NIETZSCHE

A. SYNOPSIS AND BIOGRAPHY

WHETHER we have now before us a poet or a philosopher might be, and in fact has been, the object of discussion. At any rate, it is defensible that it would better have served the lasting value of Nietzsche's work, and that the poet in him would have been brought into greater harmony with the thinker, if he had utilised the form of drama or dialogue, or perhaps a form similar to Kierkegaard's *Pseudonyms*, for the presentation of his ideas. For various conflicting thoughts bestir themselves in him, and that with equal vehemence. It is as if, not only in different works, but even in the same book, different personalities come to the fore. His leading thoughts—at any rate, what I shall try to look upon as his leading thoughts—he clothes in a poetic form, for he could only utter in great pictorial strokes that which lay in his inmost heart. Erwin Rhode, the most famous man among the friends of his youth, treated him first of all as a poet, and was consequently delighted when Zarathustra began to appear. "I have long felt that Nietzsche is suffering from . . . an exuberance of poesy, which is not to be calmed in mere composition,

and is now causing him inner fever and distress." Nietzsche himself is very clear as to the relation of the poetic and the philosophical elements in him, and the importance of both for him. (See the preface of the new edition of his youthful work, *The Birth of Tragedy*, 1886.) He takes it as his continual task to view science from the standpoint of art, and art from the standpoint of life. This expression shows that I was right in designating his line of thought along with Guyau's the philosophy of value. Just as with Guyau, the force and fullness of life are his inmost convictions. His aim is a new positive valuation of life on the basis of a history of culture. Compared with this that which comes most into notice for the common public, the doctrine of slave and master morality, social dualism, and contempt for the great mass (the "rabble"), is derivative and subordinate; and, indeed, as I shall endeavour to show, wrongly derived. In this connection, in the relation of his basic thoughts and special views and antipathies, his greatest contradictions are to be found. Those of his writings in which these passages, derivative as compared with his basic thoughts (and falsely derived) occur, are yet the most widely read. His literary effect depends on this aspect of his authorship. Without wishing to renew in this place the strife which I and Georg Brandes for some years waged about Nietzsche, I cannot help remarking that Nietzsche's introduction into Danish literature with this aspect emphasised was unfortunate. Stress was laid on what was most striking in him, not on what was fundamental. Now that it is possible—especially in view of the posthumous publication of so many of Nietzsche's writings and drafts—to view his production as a whole, it seems humorous to

me that the one thing, so to speak, on which I and my then opponent were agreed, was a thing about which we were both wrong. We were agreed that Nietzsche was an opponent of eudaemonism. But it now appears that Nietzsche was in fact a hearty eudaemonist. This must be brought out here, where we have nothing to do with what may be most epoch-making in literary respects, but have, on the contrary, to treat what is decisive as regards philosophy: the fundamental thoughts, their basis, and their struggle.

The importance of the literary and poetic elements in Nietzsche makes a presentation and critique of his thought more difficult than is the case with any other philosopher. In order to give a generally correct picture of him, my treatment will have to be more circumstantial than it would need to be if we were only making a computation of his thought. It will, however, be of great psychological interest to study the relations between thought, art, and life, in a great genius, whose aspiration it was to render all thought and poetry serviceable to the deepening and elevation of life. A psychological account of this will also be of philosophical significance.

Friedrich Nietzsche was born on October 15, 1844, of an old clerical family in Prussian Saxony. He himself would have preferred a more illustrious origin, and he believed that his great-grandfather had been a Polish nobleman. Some of his critics think, on the other hand, that they find nothing in his way of thought but the inheritance of the clergyman's son. At a very early age he was subject to other influences than the ecclesiastical, having, during his school and university days, applied himself with zeal to classical studies. His first-

hand acquaintance with the intellectual life of Greece, and his enthusiasm for it, were decisive for the poetry and aspiration of his whole life. But the study of Schopenhauer, too, which he combined with philology, was of profound significance. Among other philosophers, Dühring and Albert Lange exerted influence on him; but Schopenhauer was his special "teacher." With reference to his Schopenhauer studies he wrote (1869) to his friend, Paul Deussen, "A philosophy which we accept from purely perceptual indications is never too much our own, for it never *was* our own. The proper philosophy for each individual is *ἀνάμνησις*, memory." The perceptive impulse in Nietzsche is always inseparably amalgamated with the impulse to art and life. This is at once his strength and his weakness—especially as his thoughts, on account of his impulsive and chaotic nature, were often dictated by momentary temper, or by a reaction against the tendencies of the world around him.

Nietzsche's second great teacher was Richard Wagner. He had already made the personal acquaintance of the great master during his student years at Leipzig, and when he became professor of philosophy at Bâle, in 1869, he associated intimately with Wagner and his wife, who were then living near Lucerne.

Yet a third master did he have: illness, which for many years sapped his strength, and ended in incurable mental disorder. This he must have contracted while taking part as hospital attendant in the Franco-Prussian War. Infection was the cause of it, and Möbius (*Über das Pathologische bei Nietzsche*) maintains, consequently, that the cerebral affection which he had to suffer cannot be taken as connected originally with his personality

although it had a certain influence on its later development that he was predisposed to it by heredity. According to Möbius, Nietzsche's case was impaired by wrong medical treatment, and his own abuse of chloral. I hold that Möbius's opinion that a definite place can be assigned in Nietzsche's writings where the illness must have begun to express its influence, is entirely unfounded—of this later. After a long struggle, sickness made it impossible for Nietzsche to continue his University work. The field of philology, too, had become too narrow for him, for the great problems left him no repose, but spurred on his imagination and his thought. In 1879 he took his departure, and during the following years lived in summer usually at Engadin, in winter on the Riviera. Among the wonderful mountains of Engadin, with their crisp air and beautiful prospects, high above the wonted paths of men in the valleys—up here “in den Weiten” some of his most illuminating ideas were, as he tells us, called into life.

It is peculiar to Nietzsche that all three of his masters influenced him most decidedly through the reaction which they set up, or through the contrast which they conditioned. Sickness steeled his resolution, and courage under suffering was his chief virtue. At first hand he learned to know the pain of living, but at the same time also the overflowing force of life, which in spite of all permitted him to maintain himself. He never outgrew the teaching of sickness; from his other two masters he could part, at least as it seemed. The breach with the living master, Richard Wagner, was a painful one. In the case of Schopenhauer, it was pessimism that repelled him at a certain point of his development; he was alienated from Wagner, both by the latter's pessimism,

and by the attachment to mediaeval Christianity which he believed that he found in the great musician,⁴² whose human weaknesses were revealed by little and little to his penetrating gaze. "Siegfried" awoke his amazement and his love; already Wotan—God as a pessimist!—had made him think. "Parzifal" he hated. He had begun by admiring Wagner's art as "Dionysian"; later he treated it as expressive of degeneration.

If we study Nietzsche's biography,⁴³ we quite naturally look for occasions which could have brought him into relation with the great mass of the people, with the "rabble," as he put it later. Yet it cannot be expected that he would have frequent opportunity of regarding mankind in the mass. We find only two such occasions, and both aroused contempt in him. Once it was roustering German students. The other time it was the theatre audience at Bayreuth, which did not correspond to his expectations of the ideal auditory for the renaissance of the great art. On the other hand, Nietzsche never had the opportunity of living among the people, and acquainting himself with their efforts, their capacities in evolution and organisation. He was a perfect stranger to the greatest social events of the nineteenth century. In the course of his illness many periods may be distinguished. He got worse about 1879, regained ground in the following years, and became worse again in 1888. Then there was a catastrophe. He sent letters to several acquaintances, signed now "Dionysos," now "der Gekreuzigte." In Turin one day he fell helpless in the street. A friend took him to Bâle, whence he later was taken home. The last years of his life he lived completely stupid at Weimar, carefully tended by his relations. He died on

August 25, 1900. Since no post-mortem was made, the nature and seat of his illness cannot be realised with complete assurance. Nietzsche's sister finds the main cause of the last illness in his excessive use of chloral.

Nietzsche was a man of contradictions. The opposition that comes out pre-eminently in him, which is impressed on his whole impulse, and was portentous for his life and importance, is the opposition between lofty enthusiasm and profound aversion. Under healthy conditions, these two opposites are two different sides of the same disposition ; with Nietzsche, they were hostile forces, which strove for the mastery over his feeling and his will. In this strife he went under. Admiration of the great and lofty, and intense longing for them, the wish to strive after them, formed the very inner kernel of his soul, but his antipathy to the mean and weak, and his contempt of them overpowered, or rather hypnotised him, and the consequence was that the thing for which he set out to fight retired before that which he wished to combat. "Reactive" humours—which he despised so much in others—always won the upper hand in him. He himself felt his intellectual peril. In 1874 he wrote to Fräulein von Meysenbug, "How glad I should be to have cast out of myself all the negative and revolting that stays within me ; yet I dare hope that in about five years I shall approach this high aim." This hope was not fulfilled, even after he had begun to work out the positive statement of his ideas. Even in the last years before the misfortune he interrupted his coherent labour in order to air his antipathies, although he had ventilated them often enough before.

The predominant place taken by antipathies in his works is opposed, not only to his enthusiasm, but also

to his affectionate and cordial disposition, as expressed in his most intimate relations. He himself, too, felt this. In a letter to Fräulein von Meysenbug (1875) he says: "This autumn I undertook to begin every morning by asking, 'Is there no one to whom thou couldst do some good to-day?' . . . With my writings I cause chagrin to many; so that I ought to try and make it good somehow." Some years later he wrote to Erwin Rhode that he was still aware that the picture which his books gave of him (he was then at the height of his polemic writing) did not agree with the picture which his friend carried in his heart. He had really "another nature" (than that which was expressed in his writings at this time); with the "first" he would have been ruined long ago!

The powerful dominance of antipathies contradicted not only enthusiasm and love, but also the optimism which Nietzsche in his last years so passionately advocated. In growing measure and in exuberant expression, he demanded a confirmation of life, a recognition of its value. But how could he demand it, when the world is so full of aversion and misery, as he always was asserting, and never stopped asserting?

These internecine dispositions of his could come to no reconciliation, either in the form of great humour, or in that of profound melancholy. Of Shakespeare it has been said that his humour is the expression of his consistent position against life. Nietzsche was not able to exhibit a similar consistent position. Perhaps this was because he was neither decidedly a poet nor decidedly a philosopher, and that the two natures warred against each other into the bargain. His contemporary Guyau, in many respects also his co-thinker, found harmonic

adjustment in melancholy, and the eternal effort of thought. This way was barred to Nietzsche. He did not attain a note which comprised in itself the quarrelling tones. Oscillations between Dionysiac frenzy and consuming disharmony brought him ever nearer to destruction. In this we may justly seek an effect of his illness. He put up an honest fight against it, for he was a brave man, a man of determination. He felt deeply the "vehemence of inner fluctuations." But when his critics called him eccentric he said with pride: "These gentlemen who have no idea of my centre, of the great passion in whose service I live, would find it difficult to discover where I have been up to the present thrown off my balance, where I have been really eccentric." His bravery he displayed in his labour and his suffering, in his want of due appreciation and his solitude. "No pain has ever been nor shall be able to make me bear false witness against life as I know it" (from a letter, 1880). "My existence is a frightful burden; I should have cast it aside long since, if I were not making the most instructive probings and experiments in the field of spiritual morality, just in this state of suffering and nearly absolute renunciation;—this glad thirst for knowledge transports me to the heights, where I sit above all torture and all hopelessness. On the whole I am happier than ever in my life" (from a letter, 1880). And later he once wrote: "Be assured that it was in the year of my lowest vitality that I left off being a pessimist."

Only one thing did he fear: pity. He was scared at the mention of it during the time of his pessimism and Schopenhauer's "teaching." This fear, which is completely opposed to his courage, is explicable partly

by his own obduracy, but is of a piece with his soft nature, which was open to the temptation of pity. By pity he understands, above all, the passive, sentimental form of sympathy, which weakens both the sympathiser and the object of his pity. Finally, pity appeared to him as the last great sin into which man can still fall, though other sins may have become impossible. The peculiarly hypnotic effect which Nietzsche's antipathies had upon him is expressed here also. At last he scented signs of disease wherever he went or lingered throughout Europe.

The form of Nietzsche's literary activity was determined by his temperament and his ill-health. He felt the need of concentration, and there are in his work certain positive leading thoughts which it was his ambition to work out thoroughly. But he was unable to subject his exuberant passing moods to the demands of the main thought and the basic impulse. The control which makes the master was not at his disposal. Hence the discord of his utterances. The frenzy of one moment is not always attuned to that of another. Aphorism was his favourite form. Each particular aphorism lets a point of view arrive at complete and often striking expression, and then give way for another aphorism which without more ado says the opposite. The peculiar work of thought is not brought out. With justice has the aphorism been called a dangerous form for Nietzsche to use. He got into the habit partly through imitation of the old French writers, especially La Rochefoucauld, whom he greatly admired, partly through his infirmity which made continuous work impossible for him. He thought things out on his walks, and wrote out his thoughts in detached form; it was for others to edit.

“ I scribble something now and then on a piece of paper as I go along. I do no desk work. Friends decipher my scribblings ” (letter to Eiser, 1880). It is in great measure this form that Nietzsche has to thank for his popularity ; for this makes it so easy to get at least a nodding acquaintance with his books. He himself says of one of his works done in this style, “ A book like this is not to be read through and read aloud, but to be opened, especially when walking or travelling ” (*Morgenröte*, Aphor. 454). It is, as he has himself said, not easy to find his particular centre. His own form of presentation has, however, made this more difficult than it would have been in itself.

B. NIETZSCHE'S WRITINGS

It follows from Nietzsche's discordant and fluctuating temperament that his writings cannot be arranged in strictly chronological order, but must be divided into groups, which are to be noted by the various relations between the leading thoughts that dominate in him.

I. *First Group*.—The problem is set, and the definite solution intimated. Characteristic of this first group is the basis for setting the problem, taken from the history of culture, which Nietzsche retains from his philological studies. He relies on sociology, whereas Guyau looks really to biology. *Die Geburt der Tragödie* (1872) is not only Nietzsche's first considerable work, but at the same time also—as far as the real setting of the problem is concerned—perhaps the most considerable of all his works. His dominant thought of a new valuation of life comes to the front, even thus early. In one of his last writings (*Götzendämmerung*) he himself says, “ The

Geburt der Tragödie was my first re-valuation of all value." The tragico-pathetic attitude towards life—symbolised by Dionysos and Apollo—was put forward in opposition to the intellectual optimism represented by Socrates. The relations between science, art, and life were personified by these three forms, and Dionysos took the highest place, although the Apollonic, constraining and formative element found greater recognition than in later works.

The attitude thus arrived at is, in the *Unzeitgemässen Betrachtungen* (1873–76), applied to the German culture of the day. Of the four *Betrachtungen*, the first includes a severe criticism of Strauss, the second a polemic against overrating the historical method, the third and fourth glorify Schopenhauer and Wagner as the great teachers. The aspiring tragically conditioned personalities stand here opposed to the inquirer self-satisfied with his own critical results and his purely objective employment with the past. Nietzsche thought later that Schopenhauer and Wagner, in whom he had reposed the fulness of his hopes, were in fact decadents, and in his later thought he can never have enough of the reaction against the former admiration. He burns his former idol, and is always rekindling the funereal pyre.

In this first group—besides the basic relations between science, art, and life—other of the Nietzschean ideas come into notice: radical aristocratism, which displays the goal of history in great men, and the accompanying social dualism between lords and slaves.

II. *Second Group*.—Here the oppositions in Nietzsche's basic thoughts come out more strongly, together with his opposition to other attitudes. In this, the breach with Schopenhauer and Wagner is of especial importance. Nietzsche speaks later of an anti-romantic treatment to

which he subjected himself, because he was suffering from Romance in its most dangerous form. The defence of life is valid against the conclusion which one is careful to draw from pain, illusion, and isolation. He thinks exactly the same here as in a letter of the year 1883, where he speaks of a long and difficult spiritual askese which he underwent for six years. The said cure or askese consisted in realistic studies. He gained acquaintance with natural science, with older French and modern English philosophy. Through this arrived a new element in his line of thought, not easily reconcilable with the elements already to hand, and this gave occasion for new polemic and new reaction. About this time he began the use of aphorism, nor was he ever able to free himself of it. Naturally its rule must be so far stronger the more different tendencies, sympathies, antipathies, came to light in him, and found their expression.

The cure which he carried out was, however, not merely transitory. The ethical problem arose decidedly, namely as a special form of the universal problem of culture propounded in his first writings. There arose in him a thorough-going doubt of the moral presuppositions (valuations) valid up to now in life and thought. "I began to undermine our faith in morality" (Preface to *Morgenröte*, 1886).

From this period sprang the works *Menschliches Allzumenschliches* (1878-80), *Morgenröte* (1881), *Die fröhliche Wissenschaft* (1882).

At the conclusion of *Die fröhliche Wissenschaft* a thought discovers itself, which in Nietzsche's later years played a great part for him, the thought that the evolution of existence is rhythmic, so that what has happened once will be repeated at a subsequent period in the same

way in all particulars. Connected with this, the great figure of Zarathustra comes out as the prophet of the yea-saying of life. He descends to men to proclaim to them that life is so beautiful that its reiteration can and must be willed (*Die fröhl. Wiss. Aphör.* 341-2). In this Nietzsche worked out in little the first part of his *Zarathustra*. He writes to a friend (June 1883): “What of life yet remains (little as I believe!) must now wholly and fully bring to expression that on account of which I have endured to live. The time of silence has *gone by*; my *Zarathustra*, which will be transmitted to you this week, will betray to you *how high* my will has taken its flight. Don’t let yourself be deluded by the legendary style of this little book: behind all the smooth and singular words stand my *profoundest gravity* and my *whole philosophy*.” I fail to see why Möbius thinks that Nietzsche’s infirmity began at this point of his joyful wisdom to attack his flow of ideas, after having already affected his feeling. Nietzsche was concerned with the figure of *Zarathustra* since his young days; and moreover it was prepared for by the Dionysos-figure in *Die Geburt der Tragödie*. The thought of the recurrence of all things Nietzsche owes to his Greek studies; we find it in the Pythagoreans and the Stoics. Now it appears quite naturally in him as a touchstone of how great is the need for the yea-saying of life. The idea may appear dazzling; just at this moment, however, it is psychologically intelligible in Nietzsche. He himself says, in his autobiographical record: “The groundwork of *Zarathustra*, the thought of an eternal future of resuscitations, the highest formula of yea-saying, belongs to the August of the year 1881; it is jotted down on one page, with the subscript: 6000 feet the other

side of man and time! I went that day to the lake of Silvaplana, through the woods; I stopped at a mighty, pyramidal, piled up mass, not far from Surlei. There this thought came to me."

The *Zarathustra* book itself I do not count in this group. The working of it out was continually being interrupted by the need of airing polemic and antipathetic humours in new aphorisms. He did not manage completely to express "his great earnestness and his whole philosophy." *Jenseits von Gut und Böse* (1886) must be taken as a commentary on *Zarathustra* (which was not yet completed—and never was completed). But it is a commentary which presupposes that the book to be commented on, which is unfinished, is already understood. Nietzsche writes in a letter (in October 1886): "Have you tackled my *Jenseits*? It is a sort of commentary to my *Zarathustra*. But how well a man must understand me, in so far as it is a commentary to him!" We cannot hold back the question how many of those who as good Nietzscheans confidently set about living "beyond good and evil" have fulfilled the challenge put forward by their master. The task he sets them is not an easy one. And it is a new form of the tragedy in Nietzsche's life that he wrote a commentary on a work which he did not complete, a commentary which stands in need of the original work—as commentary! *Zur Genealogie der Moral* (1887) was to be a further amplification of the *Jenseits*. It is an attempt to ground the social dualism which comes out so strongly in Nietzsche's aphoristic writings, on an historical basis.

In these two works, the theories of "Sklavenaufständen" in morality and of the necessity of an absolutely new table of values come clearly into notice,

although Nietzsche traces them back to *Menschliches*, *Allzumenschliches* and to his stay in the south of Italy in the year 1876. These are the ideas with which Nietzsche created his greatest and most widespread sensation. In this comes out most strongly Nietzsche's great impulse to feel himself far from the rabble in the *Pathos der Distanz*, and his caste morality is expressed in its grossest form. But it is to be noted that both these writings are sections of a work planned as early as 1881, and cannot consequently be treated as Nietzsche's last word. The temper manifested in them stands ultimately in decided opposition to his most profound endeavours, a contradiction which he himself sometimes felt. Frau Elisabeth Förster-Nietzsche gives in the preface to vol. xv. of Nietzsche's works explanations of the literary connection of his work of 1881-88, and especially of the relation of the various works to the masterpiece, and to its positive conclusion. Hence it is also to be seen that a succession of strongly polemical writings of his last year of health (1888) are likewise sections of the chief work. Thus: *Der Fall Wagner*, *Götzendämmerung*, *Nietzsche contra Wagner* and *Der Antichrist*.

III. *Third Group*.—To invest his antipathies and his polemics with their full measure of expression, Nietzsche found difficult. Just as he had got to the ideas which should complete his main work, he interrupted his labours in a feverish haste to let fly his protests. And yet it is that man's business who will undertake a revaluation (even of all values) to make it clear to himself and to others, on what basis and with what standard this revaluation is to take place. Nietzsche, too, has sought such a basis, albeit he has not attained to a full present-

ation of it. But he did not see clearly that the radical aristocratism and the social dualism which he had espoused in his writings, and to which he owed his greatest literary triumphs, stood in insoluble contradiction with his leading thought, his basic value: the force, soundness, and joy of life. In two unfinished works he endeavoured to carry through this leading thought as the final measure of value. The one is *Also sprach Zarathustra, Ein Buch für Alle und Keinen*, of which four parts appeared from 1883 to 1886. Closely connected with these four parts is the extremely important sketch of a concluding part, which is printed in vol. xii. of the *Werke* (p. 321). The other work, which was to render in more philosophical form what *Zarathustra* gave in poetical form, is *Der Wille zur Macht: Versuch einer Umwertung aller Werte*. It exists only in fragments, which now appear in vol. xv. of the *Werke*. Its conclusion is the same as that of *Zarathustra*, for the title decided on for the last book was, *Dionysos, Philosophy of Eternal Repetition*. But Nietzsche had exhausted himself by his antipathies to such a degree that now his power to put forward his own positive ideal in picture and thought was shattered. Especially was he in this way unaccustomed to all coherent thought, and he fostered against it, as against all determinate form in general, so great mistrust, that in the end neither Apollo nor Socrates were able to express what Dionysos meant. In his ecstasy, Dionysos wore himself out.

C. THE STARTING-POINT OF THE HISTORIAN OF CULTURE

Nietzsche desired a new Renaissance, and, like the Italian Renaissance, he begins with eulogy of the Greeks.

Here, his philological and his philosophical interests made a pact. After having, as a quite young man, held the professorship of Philosophy at Bâle, he was afraid of becoming a Philistine, a "rabble-man," if he buried himself in specialisation. He wished to animate his science with fresh blood, for he was using it to solve the great life-problem. His masters in this attempt were to be Schopenhauer and Richard Wagner. In *Die Geburt der Tragödie*, the blending of Dionysiac enthusiasm with Apollonic harmony was emphasised as the weightiest moment in the history of Greek culture. The Bacchanalian frenzy, the expression of the overflowing fulness of life, was, through Delphic influence, which gave it figurative and artistic expression, brought into clear forms. The tragic art arose out of the Dionysiac Satyrchorus; the content of the choric song expressed at first the visions of the chorus, who saw the persecution, the exhaustion, and the reanimation of his god in great pictures. Thus was Tragedy born of the spirit of music, as interpretation of the great destinies of life. The dominant notion of Greek culture, which we owe to Winckelmann, Goethe, and Schiller, overlooked the Titanic background of the ancient harmony. Dionysos as the precursor of Apollo! Picture, word, and thought are secondary, derivative, in comparison with the great life-stimulus.

Greek tragedy found the source of its ruin in Socratism which taught that understanding was the main thing. Under its influence, Euripides became the first matter-of-fact tragedian. Gradually tragedy had to give way to matter-of-fact, bourgeois comedy, and Plato made his game of the poetic inspiration which knows not what it is about. Here enters a new type of humanity, the

theoretic man, the inquirer, who finishes perhaps by placing seeking higher than finding. From this time on there is a standing conflict between the tragic and the theoretic treatment of the world, until the matter is settled by Goethe's *Faust*, Kant's *Critique of Reason*, Schopenhauer's philosophy of life, and Wagner's music. Highest, however, among these liberating powers, stands the art of music, as Wagner has exercised it. In it, we listen to the very heart-throbs of existence; in it bestirs itself the Dionysian, the Bacchanalian, never-resting aspiration, the inmost force and basis of existence as a whole. It is important that the need of representation has been awakened; but aspiration transcends every representation. Art is not only the imitation of nature, but also its fulfilment and its conquest.

Nietzsche applies the history of culture in great strokes. This is true, not only of what he says of Greek culture, but also of his statements about Christianity, the Reformation, the Revolution, in his later writings. In Dionysos, Apollo, and Socrates, he has personified three tendencies which are always striving and struggling with each other in human life. Purely historically, he is not right to take Socratism as the main cause of the downfall of Greek culture. The main cause lies in the fact that Greek life was drawn into the whirl of great world-events, and that it was, through its (Apollonic, if you will) differentiation into small states, broken up by the necessity of maintaining itself in new relations. Psychologically, then, it is also one-sided to let energy be moulded by fancy, and both be informed by thought. There is found in every time, in individuals and in the race, an opposing flow of thought, through representation, up to feeling and will. Socrates himself was in-

deed a great positive force, the prototype of the great harmonic characters of the concluding period of classical antiquity, where there was no more singing together in chorus, but where, on the other hand, the voice of the individual (as in the fully dramatised tragedy) had to testify what profit he had got from life.⁴⁴

D. THE GOAL OF HISTORY AND THE SOCIAL DUALISM

Against the exaggerated importance which, in Nietzsche's view, has been attached to the historical method in modern times, he exclaims: "Give heed to the living of life! (*memento vivere!*). Let not the past weigh upon you too heavily, so that instinct, personality, art and thought suffer under it. Otherwise—as Hesiod feared aforetime—a time will come when men shall be born greybeards!"

The importance of history does not lie where we commonly imagine that we shall find it, in endless evolution, or in the destiny of the great mass of men. The whole value of history is concentrated in truly great individual men; in them it has reached its end, and the long process of history comes into consideration only because it provides the occasion and the power that is necessary to the rise of such men. The goal of humanity cannot lie at the end of history but only in the highest exemplars of mankind. All this talk of historical development is to the bad; it wastes our force, and incites the masses. The great mass of men are only means, or impediments, or copies; for the rest, "the Devil and Statistics take them!" Great things do not depend on the activity of the masses; the noblest and best has no effect on the masses.

Here Nietzsche expresses his radical aristocratism (aristocratic radicalism is a wrong term) (*Unzeitgemässe Betrachtungen*, Pt. II.).⁴⁵ The word "radicalism" would have been difficult of acceptance with Nietzsche for he is, on the contrary, in all things relating to the "rabble," very conservative. Here we must make a choice; we cannot follow Nietzsche and at the same time be "radical" in social and political—and especially not in ecclesiastical—matters. Among his adherents, the person who writes under the pseudonym Peter Gast, who has edited, published, and commented on several of his books, has understood this clearly.

The primary motivation of aristocratism in Nietzsche stands thus in connection with his notion of history, the significance of which he seeks to reduce to the most exclusive satisfaction at the appearance of the great man, raised above past and future, without being an effect of the former, or cause or means of the latter. Yet there is an inconsequence in making the mass of men not only a hindrance or a copy, but also a means. It is not easy to see what interest statistics should have "for the rest" in meddling with the mass, if it is never either means, copy, or hindrance; or what satisfaction the Devil may derive from it, if it is not a hindrance. Schopenhauer's influence, which Nietzsche was never able properly to dispense with, lies back of his philosophy of history. It is remarkable that Nietzsche does not grant how pessimistic this attitude is, although, during the last years of his activity, he endeavoured to free himself from pessimism. A sharper contradiction, consequently, as we shall see in the sequel, comes into notice at this point of his work.

Later he assigns a somewhat different origin to his

aristocratism than that of the philosophy of history and of pessimism. In *Menschliches, Allzumenschliches* he proceeds from the life-force to the originality of culture as a standard. If life in general must advance forward and upward, its forward and upward movement can only be represented by a higher caste, which can work freely. This presupposes a lower caste, which—like a sort of Cyclops—can urge material labour, which yet is always more or less forced labour. Only this higher caste possesses the possibility of spiritual freedom. “The most exalted caste,” says Nietzsche, in one of his later writings (*Der Antichrist*, § 57),—“and that I call the fewest—has in perfection the privilege of the fewest; to it belongs the presentation of fortune, beauty, goodness, upon earth.” The two castes are sharply held apart from each other. Their antagonism is necessary. The lower caste is capable of being endowed with virtue, in so far as this is possible to a machine or a crowd. Religion, customary morality, and bourgeois virtue, are suitable for the rabble, not for the elect. “I cannot,” says Nietzsche (*Der Wille zur Macht*, Aphor: 472), “undervalue the love-worthy virtues; but greatness of soul does not tally with them.”

The superior caste is only end, not at the same time means. It is, according to Nietzsche, evidence of corruption when an aristocracy ceases to regard itself as the peculiar meaning and justification of society, and does not rely upon its right to make innumerable other men into slaves and labourers, beneath the level of humanity. Society exists only as a substructure and scaffolding for the elect beings, in whom the aristocracy consists, as a climbing plant in Java rests upon an oak, to rear its flowers to the light, and there to display its

happy estate! (*Jenseits von Gut und Böse*, Aphor. 258). By its very existence this aristocracy expresses what makes life valuable. On the other hand, their importance does not consist (as is the case with the ideal states pictured by Plato and Comte) in directing and elevating the other grades. On the contrary, even at the very last (*Der Wille zur Macht*, Aphor. 12), Nietzsche explained it as a "leading point" that the task of the higher species does not consist in elevating the lower, but that the latter is the basis upon which a higher species can live out its own task. Yet this higher species has also a future goal: to work for the coming of the superman. "O my brethren," says Zarathustra (*Also sprach Zarathustra*, iii.), "I consecrate and point out to you a new nobility. Ye shall become procreators and cultivators and sowers of the future; . . . your children's land shall ye love: let this love be your new nobility." Thus there is even yet an end in the future, and the goal of history is not attained in aristocracy. The production of a new race within the higher race is demanded. It would seem that the problem is more difficult than it appeared in the beginning.⁴⁶

The lower race, the democracy, serves for material basis, and has to perform material labour. Democratic institutions—in spite of their tediousness—have the useful quality of keeping tyranny at a distance. But of how it is possible to keep the lower race within determinate limits we hear nothing. Nietzsche himself says in his first book that there is nothing more fearful than a barbaric state of slavery, which has learned to treat its own existence as an injustice, and prepares to take vengeance. But can we keep the Cyclops from learning and comparing? It will always certainly be easier to

convince the lords that they have need of slaves, than to convince the slaves that lords are necessary to them. Nietzsche is here too naïvely romantic, or perhaps too barbaric. The maintenance of the military state he explains as the ultimate means of retaining the tradition with regard to the highest, the strongest human type (*Der Wille zur Macht*, Aphor. 327)—an expression which throws light on Nietzsche's inner connection with modern German conditions. So, too, his friend Peter Gast extols the military as the "lordliest, tensest, manliest institution of our plebeian, commercial, and effeminate times!" The enlightenment of the people is thus an evil, for it renders the inferior race disinclined to put up with its fate as means or copy.

Yet the superior race is in need of strong labour and great self-domination, to be able to maintain its position. The nobility must regulate its conduct with punctilious care, if it is to preserve respect for itself. The higher caste ought not to live like the rabble. It must live frugally and without ostentatious luxury. Gilded brutality and foolish conceit shock the respect due to culture. At least, sudden enrichment without labour, and ill distribution of property are dangerous (*Menschliches, Allzumenschliches*). Thus an allowance is to be made, and the higher caste or race cannot without more ado live out life on its own account. It must "rule" itself, and perhaps also the other caste (especially if soldiery is necessary).

It is not easy to see why the great should become smaller through the exercise of a function. As if the value of power suffered through its exercise! Where there is really a preponderance of force, there is also the capability of being end and means at once, and this in

the grand style. In amplitude of activity at any rate, we have the proper criterion of power.

In this point the basic distinction comes out between Nietzsche and Guyau. They agree in laying great stress on the force and overflowing fulness of life. This is the object of their common belief. Nietzsche, in his copies of Guyau's books, has furnished the expressions of this tendency with marginal notes, which express his recognition and his annexation of them. But when Guyau finds in spontaneous expansion a basis of resignation and sympathy, both for men and ideas, Nietzsche protests in his notes, and when this thought of Guyau's recurs, he writes in the margin "Fixed idea!" Himself he explains this same spontaneous impulse to activity, conditioned by the superabundance of force, as a "Will to Power," and more closely as an impulse to let one's power go out over others. Like La Rochefoucauld, he will refer all feelings and traits to egoism, and egoism he especially puts forward as the impulse to "let out power."⁴⁷ Doubtless Guyau was right in his opinion that this spontaneous impulse lies deeper than the distinction between egoism and altruism. Nietzsche is here more dogmatic than the French philosopher.

There is a greater contradiction in the social dualism, when the inferior caste is required to admire and honour a culture in which it cannot itself participate. How can the rabble have respect for great phenomena, if they stand in no intellectual relation to them? Carlyle viewed this more justly than Nietzsche, when he remarked (*Past and Present*, i. 5) upon the catchword "aristocracy of talent": "The true sense for talent presupposes true respect for it, and, O heaven, presupposes so many things!" These many things

Nietzsche allows to lie quiet, fully occupied by the "Pathos of Distance."

E. THE SLAVE-REVOLT IN MORALITY

The social dualism is, according to Nietzsche, not only just and desirable but also natural. It finds its explanation in the historical origin of morality (*Zur Genealogie der Moral*). Moral concepts and relations flow from the dominant, the powerful, the fortunate, and express their feelings of happiness and personal consciousness in contrast to the weak and powerless. The "good" were originally the distinguished, the mighty, the exalted. "Good" means "First-class"; with unegoistic actions, on the other hand, it has nothing to do. The higher culture often begins with the subjugation of a weaker race by a stronger, whereby a relation of contrast arises, which renders the superiority perceptible. The concept of political precedence becomes a concept of intellectual precedence.

The zealous study of Theognis, which Nietzsche urged in his earlier youth, has here left its tracks. In Theognis, the inveterate aristocrat who was expelled from his native city of Megara, the "good" are men of the aristocracy, the "evil" men of the people. For the rest, Nietzsche used the migration of peoples, the Renaissance and Napoleon as historical examples. It is possible that influences from his childhood have also co-operated. Naumburg, his native town, was a bureaucratic centre of the Province, and the self-confidence of the "Geheimratskreise" was the first sample of "gentility" with which the destined apostle of spiritual aristocracy became acquainted. It is always characteristic that he

treats and investigates the relation of contrast from one side only, and does not think upon how this contrast may affect the other party, what feeling of fear and reverence, of confidence and admiration, the great and radiant figures may be able to arouse. Above all it is this aspect of the relation in which the moral ideas have their origin.⁴⁸—It would most certainly have followed, also, if Nietzsche had taken this up, that the “distinguished” natures, in consequence of his view, would have to remain quietly within themselves, without reactive feelings. Then it is not consequent to conceive a relation or in any way to allow oneself to become conscious of a contrast.—For the rest, the dominating race must already have formed a society, before the conquest and moral ideas have arisen on the basis of a valuation of those qualities (*e.g.* courage), which had the greatest worth for the society concerned.

The natural valuation which arises from the powerful and the fortunate, in whom the will to power can bestir itself freely, is now, according to Nietzsche, overthrown by a moral slave-revolt, from the consequences of which our culture even yet suffers. For this the Jews especially are to blame—this people who called themselves the chosen, but whom Tacitus with greater justice designated as born to slavery; their prophets it was who taught that to be rich and mighty was the same thing as to be evil and godless. The “World” was a term of abuse; poverty and affliction were lauded. The continuation and full development of this tendency came with primitive Christianity. In the Revelation of John we trace especially the hate of impotence. Here was declared a war between Judea and Rome, between the weak and the strong. Freedom, pride, and individuality

were immolated. Paul in particular has proceeded with this line of thought. The Apostles had no understanding for Jesus's death, which was nothing else than a great act of freedom. They made it into an expiatory sacrifice, into a glorification of suffering. In his later writings, Nietzsche heaps such a medley of belittling expressions upon Christianity, that his sister was only able to explain it by the over-application of chloral, during the last years before the catastrophe.

According to Nietzsche, not only one moral slave-revolt has taken place, but several. Before Christianity there are already such revolts in Buddhism and Socratism, only of more distinguished kind. Later, the Reformation is a revolt against the outstanding worldliness of the Catholic Church and the Renaissance; nay, even freedom of thought, the Revolution, democracy, and—natural science (which is a democratisation of Nature on account of its principle of universal conformity to law!) are revolts of this kind. Post-haste Nietzsche develops the concept of the moral slave-revolt. After the first glance he uses it as a fixed idea, to be applied to endeavours in the highest degree various and internecine. If it be proper at any time to discover a witness of Nietzsche's infirmity in his ideas, it is at this point, where he is sawing through the bough on which he is himself seated.

Nietzsche has not allowed that "Life" is rich and powerful with those very people whom he calls slaves. Primitive Christianity is just what Nietzsche denotes as a Dionysian movement, a spiritual breach, partly in the form of ecstasy, an expression of intense longing, an excelsior! The hierarchy and the ecclesiastical organisation have played a part similar to that of Delphi in

Bacchantism, having embanked the powerful stream, not always in the Apollonic manner, to be sure, in spite of the distinction which in Nietzsche's eyes is the badge of organised hierarchy. Analogous remarks may be made concerning the other slave-revolts.

Nietzsche found a basis for his theory of slave-revolts in the suppositious observation that the happy are better men than the unhappy. The happy live on their own resources, and unfold their activity spontaneously, as conditioned from within. They need neither hate nor misrepresentation, for they are not dependent. The activity of the unhappy is determined from without, and is reactive in kind; envy, mistrust, hate, and delusion are their neighbours, for they are in sooth dependent. The happy say, Yea, the unhappy, Nay.—Naturally it cannot be disputed that when the active or happy natures "exercise their power" in a harmful manner, they can more easily forget it than those on whom the power has been exercised. But it does not follow that contempt must play so great a part in the psychology of the happy; for this is a decidedly reactive feeling.

Still, this is not the definitive basis. The decisive ground of the social dualism and the theory of the slave-revolt, Nietzsche discovers—singularly enough—in the happiness-principle.

F. THE PHILOSOPHICAL GROUND OF THE SOCIAL DUALISM

Nietzsche often calls himself an immoralist, and explains that he would do away with morality, and in fact calls one of his writings "Beyond Good and Evil." Yet it must have become clear from the foregoing that it is only the slave-morality that he proposes to destroy. In

one place he says also (on the analogy of a well-known epigram of Schiller) that he will remove morals "from morality." But if he will elevate a standard, a principle is necessary which must express in necessary manner a fundamental value. If now we ask what this principle of value is, we find, to our surprise, that it is the happiness principle "Human Prosperity" (*vide* Preface to *Zur Genealogie der Moral*). His basic question is whether the earlier moral valuations of the human race have or have not been serviceable to prosperity. His attitude is mainly affected by whether an action or a personality expresses a rising or a sinking of the life-force. He now sets himself the task—frankly a little late in the day—to arrange values in a real series of stages, which shall be determined by the strength and compass of the force ("Numerical and Mass-strength of the Force," *Der Wille zur Macht*, Aphor. 353). Lugubrious declamation against slave-morality and the herd claimed so much of his attention that he did not get so far as an earnest handling of this task, and so to a more definite development of what he calls his "moralistic naturalism" (*Der Wille zur Macht*, Aphor. 192). A Dionysiac valuation is needed, an ethics of the force and joy of life. From that pinnacle of joy, where man feels himself wholly and solely as a god-like form and self-justification of nature, right down to the joy of the healthy peasant and the healthy anthropoid—this whole long, immensely long light and colour scale of happiness, the Greeks called, not without the thankful reverence of the initiated into a mystery: Dionysos! (*Der Wille zur Macht*, Aphor. 482). It is thus a matter of shaping the happiness that corresponds to the given stage of life. The Utilitarian ethics, which Nietzsche so often derides, can—less certain

“fashions,” which conceal unsolved problems—assent to this notion, especially when it is explicitly stated that it does not depend on the happiness of an individual or of a caste, but the willing of the desired powerful unfolding and happiness of life for the race, “only the will for completeness of life.” Only for the will of the whole race can importance be attached to the self-preservation of the individual. The concept of the individual in particular, as it has been understood up to the present, rests on an error (*Götzendämmerung*, Aphor. 33). Here, then, the social dualism and master morality find their ultimate ground. Masters and supermen have consequently not only their ends in themselves; how they are finally to be valued depends on whether they lie in the path of the rising life of the race or not; and depends thus on their contribution to the development of human life. Peter Gast, Nietzsche’s pupil and commentator, admits that the master is, in a certain sense, utilitarian; yet he steers clear of ordinary utilitarianism, which allows only for the proximate advantage. (Where this “ordinary utilitarianism” is to be discovered is, unfortunately, not communicated. In all its forms, Utilitarianism demands that the effects of actions be followed out as far as possible.)

Now it may very well be, in and for itself, that the well-being of the race demands a sharp contrast between lords and slaves, although it is difficult to see how such a contrast can be maintained and worked out in the culture of Western Europe. But an earnest effort to think this out is not made. The attempt which J. S. Mill in his time undertook to demonstrate from his democratic basis the necessity of individual freedom, peculiarity, and greatness was far more earnest than that

which Nietzsche made, from his aristocratic basis, to prove the necessity of a state of slavery. But yet Nietzsche sneers at Mill and the other English thinkers, whose shoes latchet—seeing that they are stronger, more methodical in their thought—he is not worthy to unloose.

One thing is certain, at all events ; it is thinkable that the interests of the human race may best be served by a social dualism ; but it is unthinkable, because self-contradictory, that one is able to regard, in one and the same view, the ultimate end as consisting in individuals and castes alone, and at the same time in the welfare of the whole race.

In ultimate, decisive points, Nietzsche is no longer a philosopher, but a poet. What he could not work out in thought, appeared to him as a great vision of the future, and to this we must turn, to understand his last word.⁴⁹

G. THE LAST YEA—AND ZARATHUSTRA'S DEATH

Nietzsche is urged forward to a thought or vision so sharply contradictory to everything that he maintains in polemic at the same time or previously, by a great effect of contrast, an impetuous aspiration wholly to overcome the view of life which he had assumed in his young days, under the influence of Schopenhauer and Wagner. In polemic he reacts against his contemporaries ; in his visions he reacts against himself, and for this reaction he can find no expression strong enough. The form of thought does not here suffice ; he stands in need of a lofty poetry, drawn from powerful feeling. He refers back to a basic thought of his early work on the *Birth of Tragedy*. Life must be glorified. The life-impulse expresses itself as the will to power, and this

will can and must be so strong and spirited, that it can choose even pain—and that it can choose the recurrence of life, of life the same in all respects as that which it has once encountered, with its misery and its pain.

Zarathustra, the prophet, has assembled the higher men high up in his mountain cave, those who have suffered under the misconstructions and persecutions of democracy. He explains to them that they will find it ever more and more difficult, that they will more and more fail in their efforts. His conclusion, that is to say, is not the preservation of mankind, but the rise of the superman. What we can love in man is that he is an over-going and a down-going. There are powers of action so great, so far, so high, that there is no wonder if the fragile vessel in which they develop is shattered. Sympathy with these higher men is Zarathustra's last sin (*Also sprach Zar.* iv.).

What, then, is the Superman? He is a form of existence as far removed from man as man from the apes. His coming is the "meaning of the earth." He is a new type of life which must be realised, and by the word "superman," the concept or symbol of this type is expressed (*Der Wille zur Macht*, Aphor. 390). Mankind will regard the realisation of this type as its hope and task, at the great noon-tide, in the midst of the way of evolution. Now he emphasises hope, the glance into the future, more than before. But what is of especial importance is that the hint of a new life which Nietzsche gives in his more positive development points in another direction than his description of master-morality. Mere power he no longer demands, but, on the contrary, high-souled love of man. Even in Christianity he now finds too little love, because it counts grief higher than

laughter. As Nietzsche must develop his ideal positively, and avoid reactive moods, the concept of the superman suffers a restriction. This is above all things for Zarathustra to grant. After he has induced the higher men to accept his thought, he has a presentiment that the great noon-tide is at hand. Now he can no longer remain in the sublime seclusion of his mountain; he is compelled, like the sun, to radiate his light over the world. "Thou great star," he says to the sun, "thou profound eye of happiness, what were all thy happiness, if thou hadst not those for whom thou shinest!" (*Also sprach Zar.* iv. "The Sign"). "Yet again will I go to mankind; among them will I go down; dying, I will give them my richest gift! From the sun did I learn this, when it goeth down, the exuberant one: then does it pour gold into the sea, out of inexhaustible riches—so that the poorest fisher roweth with golden oars; this indeed I saw once, and, seeing, wearied not of my tears" (*ibid.* iii. "The Old and New Tables"). Now does Zarathustra hate his own hatred: "A blesser have I become, and a yea-sayer; and therefore I strove long and was a striver, that I might one day get my hands free for blessing" (*ibid.*, "Before Sunrise"). Here the will to power is expressed in a manner indisputably different than that which speaks of contempt of the rabble. The life impulse itself, the impulse to scare away pessimism from all corners, leads Nietzsche to this height. Here the consequent unfolding of Nietzsche's ground-thoughts comes to its perfection. Now that Zarathustra has seen his aim so clearly, and understands his true task, he strikes up his "Song of Midnight," the Intoxicated Song. This song he introduces at the hour of midnight, before Zarathustra's cave. In this strophe a whole

mood is struck, and a comprehensive thought made clear, which otherwise he was unable to apprehend and fit together. Here he has come as near to a great, concentrated expression of inspired resignation and hope acquired, as is at all thinkable. The song runs :

O Mensch ! gib acht !
 Was spricht die tiefe Mitternacht ?
 " Ich schlief, ich schlief—,
 Aus tiefem Traum bin ich erwacht :—
 Die Welt ist tief,
 Und tiefer als der Tag gedacht.
 Tief ist ihr Weh
 Lust—tiefer noch als Herzeleid :
 Weh spricht : Vergeh !
 Doch, alle Lust will Ewigkeit—,
 — will tiefe, tiefe, Ewigkeit ! ”

Through pain, sorrow, doubt, and consequent contempt, Nietzsche had worked himself into a profound belief in life. He expresses here in poetical form the old biological theory of the feeling of pleasure as the expression of the power and progress of life. In every emotion of pleasure he sees a will to the elevation and continuance of life.

This thought, the will to the preservation of life, takes, with Nietzsche, a singular form. It is one with a will to the recurrence of life. It appeared to Nietzsche as a necessity that what once has happened must happen again in the future, in the same way. He starts with the assumption that the world consists in a determinate aggregation of elements, so that only a determinate finite number of combinations is possible. When these are exhausted, there must be a recurrence. The world's course is a circle, which has already repeated itself

numberless times, and will equally repeat itself in the future.⁵⁰ The comprehension of this thought filled Nietzsche with terror. He treated it as a scientific necessity, which put his optimism to a severe test. Not only is pain to be chosen and accepted now, but all that is suffered is to be endured again and again for ever. So much the greater was his jubilation when he overcame his fear of repetition, and in this conquest found the highest possible of all yea-sayings of life. It is interesting to note how Nietzsche here goes hand in hand with Kierkegaard, to whom recurrence was always a touchstone of the force and earnestness of life. Kierkegaard's proposition "Who wills recurrence, he is a man," belongs also to Nietzsche's root-principles. This thought is the basis of Zarathustra, though there it is often obscured, calling forth aphorisms but scantily connected with it. If it had been Nietzsche's fate to work out the conclusion of his book, the idea of the work would have come more fully into its rights.

This thought of future recurrence Zarathustra first teaches to the Higher Men, whom he has brought together before him, in front of his mountain cave. After some opposition he convinces them, so that even the "ugliest man" breaks out: "Was that life? Well! Once more!" Hereupon Zarathustra goes down to teach the great mass of men the conditions of life. He calls men together to a feast, and gives them new laws. An order of precedence will be confirmed whose foundation is the real value of life. The struggle of the castes is now happily over and done with. It is explicitly denoted as the task of the ruling caste to earn for itself the profound, unqualified confidence of the ruled. The hate of democratic levelling has had its day, and that is over

now. Then Zarathustra goes on to his own special task. First, he teaches great hope in the coming of the Superman, which will be possible through the working out of new values. Then comes the great, the terrible moment, in which he teaches men that all will reiterate. But now the thought is tolerable, not only to himself, but also to men. For to his question: "Will ye that all happen yet again?" all answer "Yea," and Zarathustra dies for joy: *vide* the drafts of parts v. and vi. of *Also sprach Zarathustra* (*Werke*, xii. p. 321 f.).

In poetical form Nietzsche has here retracted the social dualism and master-morality. As soon as Zarathustra sets out to teach the highest truth to the mass of mankind, it is a proof that the struggle of the castes is over. Now the race has a common goal.

It cannot be denied that Nietzsche puts our belief in life to a hard proof. Yet it is very possible to have a great faith in life without wishing to commit again the same excesses of foolishness or roguery, and to suffer repeatedly the same pains and sorrows. We have, moreover, no ground for accepting an absolute reiteration. Experience shows us none such, and the more our knowledge probes the depths of existence, the more inexhaustible it appears, and has always greater complexity and more far-reaching possibilities to offer us. Every combatant life-philosophy—and every philosophy of life that will look reality in the face must be combatant—must keep a chief place for the thoughts of the new and the unknown, which emerge, now as menacing danger, now as the stimulating task, now as beckoning hope. Nothing supports such narrow bounds of reality that a determinate sum of existents shall alternate for all eternity. Our faith in life need not go through the

purgatory that Nietzsche, in his Dionysiac frenzy, prepares for it.

As formerly he intensified to an extreme degree the necessity of disharmony and contempt, so he has let his reaction against all pessimism reach the highest intensity in his concluding thoughts. There are expansions of feeling which dominate his thought at every point. Not on account of his scientific handling of problems, but on account of his eager manner, and his often inspired pathos with which his opposing attitudes come to expression, and thus are put forth clearly and sharply defined, has he his place in the history of philosophy. His importance is symptomatic. He makes us spectators of an intimate drama, in a soul that felt the tendencies of its age and of life profoundly and powerfully.

III

RUDOLF EUCKEN

AFTER a succession of preliminary works (the chief of which are *Die Einheit des Geisteslebens*, 1888, and *Der Kampf um einen geistigen Lebensinhalt*, 1896), this gifted thinker (born 1846), who is at work in Jena, the ancient hearth of Idealism, has pronounced upon the religious problem in his book *Der Wahrheitsgehalt der Religion* (1901).

In this Eucken does not aim at a systematic philosophy of religion. Such a system is in his view impossible for the present on account of the obscure and uncertain conditions of the religious sphere. "In the spiritual anarchy of our time one can attach oneself to no stable and suitable point to lead all discussion of the more profound kind back to first principles, and build up again from thence. So, too, we must work up from the general consideration of human existence step by step to the point where the problem of religion breaks out, in order to render itself as the middle point of all our striving after soul and meaning in our existence." The author explains that he is a seeker, and he addresses himself to seekers. He finds in the present time a strong yearning for religion, bound up with a clear consciousness of the inadequacy of the present form of religion. The

new type of life which the Renaissance advocated, and the thought-activity thus instituted, led away from Christianity. The sublime culture in which this type of life and this thought-activity took their rise has led to inner complications, and its sufficiency is shaken. Thus we are given to think whether religion ought not to give us something that cannot be lost to us. We feel the lack of a great goal, which shall illumine, not only the great body of mankind, but also shall be able to raise individuals above their own petty conditions. At the same time, the old riddles of life which were looked on as solved, or at least as superseded, come again into the foreground. Especially is there felt a sharp contradiction between the spiritual concerns of men and their real situation. All this leads to a conflict between religion and culture.

The means for deciding the struggle are, however, at the disposal neither of religion alone nor of culture alone. The decision must come about through the fact that in both religion and culture we distinguish between the eternal and the transitory, between the indispensable and the intolerable. A revision of the very ground-conditions of our spiritual life is proposed, and this revision is matter for philosophy. Not in the sense that it will be possible for the latter to construct a religion. For religion is actual, is the expression of a real existence, which can indeed be contemplated when it exists, but which cannot be artificially produced. Since, however, the demonstration of an intellectual aspiration is here in question, it is no wholly simple matter; intellectual labour is necessary, in order to find the peculiar place of religion in the whole coherence of life. In this, philosophy can go no further than the demonstration of possibilities,

which can only be transposed into realities by means of great personalities, and often among great revolutions of human relations. But if it can be shown that religion is connected with the most intimate ground and foundation of our existence, every attack and every criticism can only serve to bring more and more to the light its inmost eternal centre.

The problem is caused by the location of the spiritual life in the scheme of existence. The persistence and development of this life presuppose that behind the spiritual processes shown us by experience, and on the other side of them, lies an eternal and coherent spiritual world (a spiritual substance, a psychic remainder), which includes the possibilities of new production, and the proceeds of the development that has already taken place. The life of the spirit must be more than mere appearance, more, that is to say, than psychology can prove. It must bear within itself an eternal principle. We must treat it, not only psychologically, but also metaphysically. The essence and value of such a treatment are one, for its highest object is nothing but the valuable kernel of existence. Only by means of such a treatment is a central content of life possible.

The Greek culture overrated form. The culture founded by the Renaissance overrated power. True culture, which is religious in character, advances "essential production" as against that of form and of force. Both form and force must be subservient to a valuable content. Form production alone leads to stiffness in plastic works of art, through which man believes that he has expressed the eternal for all time. Force production leads to restless movement, so that all substance is analysed. Essential production, on the other hand,

maintains the continuous interaction of eternity and time, for the eternal possibilities become transposed by works in time, and, on the other hand, the result of the whole remains in the form of eternity. The preservation of the given and the creation of new contents must go hand in hand, to the end that we may be able to advance to true reality.

The line of thought that maintains the possibility and the necessity of essential production Eucken calls the noological (from *noos*, reason, mind, placed by the Neo-Platonists higher than *psyche*, soul). He puts it forward in opposition to the psychological treatment, which is concerned only with the conscious life given in experience. He is convinced that he proclaims nothing new, but an old truth, which had been inculcated, on the one side, pre-eminently by Kant with his determinate distinction of logic, ethics, and aesthetics on the one hand, and the empirical psychology on the other. Here validity or value is opposed to reality; so that finally, validity is supported as the highest reality. The noological line of thought is distinguished from the speculative and metaphysical lines of earlier times, which believed that they could arrive at an understanding of phenomena by theoretical abstractions. The noological method rests on experience, on fact. To explain noologically, signifies to arrange a spiritual form of life in the totality of intellectual life, to prove its position and its task in this totality, and thus to illuminate and fortify it. This explanation is distinguished from the psychological, which only consists in identifying processes through which man acquires and adopts a spiritual content. Both methods are applied to the overcoming of the opposition between idealism and realism. Idealism has maintained

the independence and intrinsic value of the spiritual content; the authorisation of realism depends on the fact that it stresses natural conditions. The realistic method of treatment comes to its rights when it succeeds in the discovery of special laws and causes in the spiritual totality supported by the noological view. But it is wrong in supposing that the causal theory can give the final criterion of truth. Idealism has rightly demanded a valuable content of reality, but has abstracted from the real conditions.

Now the noological treatment leads, according to Eucken, to just the facts maintained by religion; to the presence of an absolute spiritual life, raised above the vital phenomena that come out in experience, and yet affecting them. There is no religion without the living presence of a higher world in our empirical world, so indeed that these two worlds stand in irrational relation to each other. Religion can exist without belief in God; this is testified by genuine Buddhism. Without a prospect above the world of experience, religion is but an empty word. The motive of religion lies in the contrast between the essence, and the form of existence; in mere experience, the spiritual life is an addition to the material, a matter of secondary importance. But this contradicts the unconditional claims which the spiritual life puts forward, and the sublime values which it maintains.

From the basis of religion, reality looks different than before. A view of the world derived from religion looks to the persistent (as against the mutable), to the free (as against the natural), to the reasonable (as against the irrational). It will observe in particular the points in which a new sphere begins, such as the transition from the inorganic to the organic, from the life of nature to

conscious life, from conscious life to the life of the spirit, and it will apprehend these successive stages as an unfolding of the inner nature of existence. But a religious view of the world such as this is incapable of demonstration. It has the character of a conviction, not a science. It is the business of philosophy to determine the relation and the limits between the religious and the scientific views of the world.

The motive of religion lies in a spiritual need. It is not concerned with the empirical happiness of man and its preservation. On the other hand, its fixed point is the totality and unity of the spiritual life, the basis of all special and individual expressions of life. The maintenance of this basis is open to question, for it is not confirmed by experience alone. Whether conviction is retained at this point depends on a powerful need being aroused. From the empirical standpoint there is ground enough for doubt. Experience in no way shows us the spiritual as an independent world, still less as the chief factor in existence. During the evolution of culture, personalities become the victims of society and progress. Even in the life of the spirit there are discordant tendencies; part is divided against part, as part of the whole; spiritual tendencies are at war, and Evil turns out to be a real power.

Against the doubt which thus arises, Eucken insists, in the first place, that this strong feeling of discord is the consequence of the great claims of life. The bitterness of sorrow and the hardness of opposition testify the profundity of our existence, and the presence of higher powers in us. With opposition, pain also disappears. Never was there a time when unfortunate experience and difficult complication caused mankind to doubt its

ideal task ; on the contrary, this doubt is active in times of indolent wealth and imagined plenty.

Secondly, Eucken is convinced that every doubt must be encountered by a stronger and a more concentrated form of religion than is offered by the indeterminate universal religion described in the foregoing. He refers to the importance of great personalities for the history of religion. With them the divine element asserted itself more strongly and profoundly than with other men, and they were capable of expressing the manifold experiences of life in clear and ardent images. In this a new life made its decided appearance, and took a determinate hold of the historical development of the race. In bringing out their importance, we make the transition from universal to characteristic religion.

“Characteristic religion” denotes, with Eucken, the historical or positive religions, in so far as these, each in its particular manner, give a new picture of life as a whole, clear in its main outlines, and set up this picture in opposition to the world of experience. It is distinguished from “universal religion” by the determinate impulse without which it could not maintain such an opposition to the empirical world. It springs from great personalities, and rises above all popular culture as an immediate expression of the inmost essence of the spiritual world. Without such characteristic religion, independent fervour is impossible. We are here concerned not only with an adornment of life, but with the emergence of a new life, a new reality. Thus, the awakenings which the great positive religions testify, are only the summits and turning-points of a great process. The divine which here breaks through did not originate in these determinate places.

Our conceptions are incapable of expressing the higher life which thus breaks out. Imagination with its symbols must come to our aid. And this is the marvelous thing about religion. Imagination is always determined by the given stage of culture and its traditions. The symbols will consequently have a historical character. The time will come when the importance of what was, perhaps, for thousands of years the expression of the highest truth, and what appeared to human consciousness as inseparable from religion, will be shattered, and will have to give way to new forms, often only after great commotion and stern struggle, while doubt, which first directed itself to symbols, can pass over to the assault on the inmost kernel of religion.

Universal religion is continually necessary as corrective or introduction to characteristic religion, which, left to itself, easily falls a prey to contraction, or becomes a mere means of consolation. The importance of the characteristic religions does not depend on any one of them having discovered a final expression of the highest truth, but on their quickening and elevating effect in times of unrest and change. We must always test afresh whether what is handed down historically really performs such a work. The Church, however, tends to hold slavishly to a standard given once for all, and to take all truth as consisting in imitation and repetition. Consequently a struggle in the field of religion is always necessary. The significance of great personalities lies in their constraining us to choose.—

Eucken's place in the modern philosophy of religion is pre-eminently determined by his decided conviction that values can only be supported by the acceptance of a higher reality, in which the spiritual life, which in

experience appears scattered and under changing forms, continues to exist in the form of unity and eternity. In a manner often profound and full of feeling, he maintains the necessity of this opposition, leaning now to the old mystics, now recalling romantic idealism, now so that the sublime poetry of the personal life-struggle finds expression in his words. Yet he emphasises strongly that philosophy can here demonstrate only possibilities, and that there are prophetic personalities who invest such possibilities with reality and determinate form. The metaphysic—or “metapsychie”—which he maintains in order to avoid subjectivism, is founded on the value of the true, the beautiful, and the good. What he calls the “noological” method is distinguished from the psychological by its effort to demonstrate that every value can be maintained only by means of the assumption of a total coherence, which comprehends as valuable vital changes which in our experience are disparate and fleeting. The noological method attaches particular importance to the great ruptures, the vastly important beginnings in the qualitative variety of the spiritual life as we know it from experience. He looks on the attempt of empirical science to demonstrate continuity in the world of phenomena as hopeless, but explains the interruptions of empirical continuity as particular results of a great transcendental continuity, of a kingdom of possibilities, of ends, and values, which reveals itself in the world of finitude only in flashes. By this Eucken is allied to romantic idealism. Noology is distinguished from the speculative method, however, by the fact that the assumption of such a total coherence is explicitly grounded only on the experience of value. It seems, then, to be clear that the starting-point is empirical and

personal. The flight from experience to "metapsychic" is rendered possible for him by the tension brought out in a great dilemma. Either, he maintains, we must look on spiritual life as a fleeting phenomenon, as an appendage of material nature, or we must assume that it forms in and for itself a great totality, and is one with the inmost kernel of existence. This dilemma appears in Eucken both where he develops the idea of "universal religion" thus making the transition from experience to an indefinite religious standpoint, and also when he goes on to "characteristic religion," wherewith he will demonstrate the necessity of a religion historically produced. The following passages are especially typical. "In this decision, it is a question, not of this or that, but of the whole of the spiritual life. In human experience it appears in an untenable intermediacy; man must either refer back from it to mere nature, and regard all striving of peculiar kind as a grave error, or he must go courageously forward, and ensure a new world for the new effort. Only an obscure manner of thought can seek a middle way between these two; only a feeble temper can support the dilemma quietly. At least it follows that without religion there is no truth in the spiritual life, and no inner greatness for man" (*Der Wahrheitsgehalt der Religion*, p. 238). "Is human life a mere addition to nature, or is it the beginning of a new world? On this question hang all the framing of our relations, all tendencies of our actions. Religion would raise human existence to other-worldly heights, and so save our life from emptiness. If the undertaking looks like a flight of Icarus, all hope sinks, even the noblest and best appear as empty production, the whole ends in unreason" (*ibid.* 319).

What here drives us to choose is always finally personal life-experience. It is especially dependent on the degree to which we take to heart the fate of value in reality. There appears to be no ground for bringing in a new term; "noology" is neither a necessary nor a happy enrichment of a philosophical terminology already sufficiently mistaken. From a private expression of Eucken which I quote—I hope this is not an indiscretion—it is clear that personal experience of the contradictions of life, and especially of the great opposition between Ideal and Reality, decided his own election, and led him to "noology." In a letter which he wrote me after having read my *Philosophy of Religion*, he said, after discussing the preponderantly psychological character of my attempt to handle the problem, "I am impelled, with every opposition to the old ontological metaphysic, more and more to metaphysic, and so to a metaphysical basis for religion. I was afraid without it of falling a victim to subjectivism, and this I resisted, especially on account of the fact that I am strongly impressed by the great conflict, insoluble in experience, of our existence; in a word, I do and must think dualistically." In this Eucken points directly to the determination of individual experience by the peculiarity of particular personality. This determines his attitude. But the more clearly this ground-principle comes out, so much the more naturally is the task assigned to the philosophy of religion, of examining the psychological foundations from which the various religious standpoints grow up, and of adding an epistemological and ethical test of the thoughts and efforts in which these standpoints express themselves. Thus the philosophy of religion does not need a special method of its own, and

“noology” is itself but a *via media* between speculation and practical belief. As speculation it underlies the treatment from the side of epistemology, as practical belief from that of psychology and ethics. The notion of the task and method of the philosophy of religion which hence follows, appears to agree best with the spirit of the critical philosophy in which Eucken indeed desires to work. The “metapsychical” basis of religion which Eucken demands of philosophy appears, finally, according to his own expression, as grounded on the need of discovering a decision of a great practical dilemma.

Eucken’s standpoint—“noology,” which leads him to his religious metaphysic—is to me an example of how personal experience of life can move to belief in the preservation of value. To me, every belief, under no matter how philosophical a form it may appear, is always only the object of philosophy, not its product. At any rate, the philosophy which produced it is itself the product of personal life-experience. Philosophy as science has, now at least, no other method at its disposal than the logical sequence, psychological explanation, and ethical valuation.

IV

WILLIAM JAMES

THE American philosopher, William James, renders a comprehensive service to religious psychology in his work, *The Varieties of Religious Experience: A Study in Human Nature*, London, New York, and Bombay (1902). James is one of the most distinguished of contemporary thinkers. He combines comprehensive knowledge with great capacity of observation, keen criticism with idealistic enthusiasm, impartiality with earnest conviction. His best-known work is *Principles of Psychology* (1890), which in many points brought fresh views to bear on psychology, and discussed questions of all sorts in a brilliant and stimulating manner. In a collection of essays, under the title *The Will to Believe, and other Essays in Popular Philosophy* (1897), he has expressed in somewhat freer form his peculiar unification of empirical philosophy with a markedly idealistic view of life, and even here lets in the questions of a philosophy of religion. The new work is wholly concerned with the religious problem, especially in the purely psychological explanation of it, but so that the other points of view from which the problem is handled come also into the foreground.

James here makes use of the researches of younger

American authors (Starbuck, Leuba, Coe, etc.), but relies otherwise on a comprehensive biographical literature, and especially autobiography. He sees clearly that the matter is too diverse to be completed in one particular treatment. Consequently, seeking at the same time to avoid a conflict over the sense of the word "religion," he explains in his scheme of work that he proposes to hold fast to a determinate sense of the word "religion," or to a determinate aspect of religion. So he defines Religion as: the feelings, acts, and experience of individual men, in so far as these men severally cogitate themselves as in relation with the Divine, however they may think of this Divine. This personal religion he regards as the opposite of institutional religion, with its more or less developed theology, and its ecclesiastical organisation. He maintains that institutional religion (with all its appurtenances) is always secondary in comparison with personal religion. This is the consequence of its traditional basis. Were we to rest content with institutional religion alone, the investigation would have to do only with the worship, the sacrifice, the ceremonial, the organisation of the Church, and religion could then be defined as the art of winning the favour of the gods. In personal religion, however, the stress is laid on the peculiar inner state, the conscience, the value, the helplessness, or the imperfection of man. If we confine ourselves to this aspect of religion, the concept is more comprehensive than if the institutional is treated as the main factor.

Personal religion is the manner of a man's "total reaction upon life" contrasted with momentary and special reactions. The experiences which we have had of life and of the world affect our individual temperament, and make us either energetic or indifferent, either

pious or satirical, either despondent or enthusiastic in reference to life as a whole. Our reaction, which often happens involuntarily and half unconsciously, is expressed in the most perfect answer we can give to the question: "What is the character of that existence to which we belong?" James, however, is willing to call such a reaction religious only when it is borne out by an earnest and uplifted disposition, by a temper which, at its highest, moves to the surrender of its own wishes, to a willing submission beneath the pain of reality, because it feels itself impelled by a power which, greater than it, disposes man himself. All really religious feeling includes a tragic element, which arises from the fact that a higher feeling of happiness has dispossessed a lower. The religious feeling includes or presupposes so many contrasts, that it is one of the richest of human feelings. The world is the richer for there being a devil, inasmuch as it thereby discovers a Saint Michael to set foot on his neck. This trait naturally comes out most in the extreme forms of religion, which seem to be abnormal as compared with the simple workaday notion. To a point, however, it comes out in all forms of religious consciousness.

This gives the general framework of James's treatment. For the more intimate characterisation of his work, I will first show how the three attitudes, which come to hand in every comprehensive discussion of the religious problem, namely, the epistemological, the psychological, and the ethical, come out also in James, although he holds pre-eminently to the purely psychological treatment. Further, I will show how he reads religious experience, what types of religion he discovers, and to what grounds, in his opinion, religion may be referred.

A. THE THREE ATTITUDES

James denotes his standpoint, both as to philosophy in general and as to the philosophy of religion, that of experience. He will in all things be empirical. All intellectual operations—they may consist in comparison, in construction, or in criticism—presuppose immediate experience. He joins company with the older English school beginning with John Locke, which always demands that determinate allowance be made for the experiences on which our concepts are founded. To this school, in his opinion, is due, far rather than to Kant, the honour of having instituted the critical method in philosophy, the only method that makes philosophy into a study for earnest men. It is a matter not only of the experiences that we have had, but also of those that we expect, or by a logical necessity must call forth if our thought depends on the consequences we can deduce from it. If all the principles we put forward were practically indifferent, *i.e.* if nothing followed from them, could we then distinguish between true thought and false? In vain has dogmatism sought for a criterion of truth which could dispense with the appeal to the future. As against Dogmatism, we have here Pragmatism, which tests every principle by following out its consequences. This view (in which James associates himself with the American thinker, Charles Pierce, the originator of the name Pragmatism) recalls, in part, the biologicico-economic epistemology, which, as we saw above, was first developed by Richard Avenarius and Ernst Mach.

James's empirical standpoint makes him sceptical of speculative and theological views. He maintains especi-

ally the multiplicity of existence, and criticises the various forms of monism. Pluralism, the doctrine of the Many, is, in his opinion, always the winner of greater honour, as well in science as in religion. From experience nothing universal, nothing absolute and all-comprehensive can be reached. Various explanations can be valid for various aspects of existence. Religiously treated, experiences of the Bad are here especially important. Has not the Book of Job proved, once for all, the impossibility of coming by a solution of the problem which these experiences move us to set? Here the monistic hypothesis will always offer great difficulties, and is not the simplest way out the assumption that the world from the beginning included elements which were not harmonious with the whole? Ordinary people have always been more or less polytheistic, and it is clear that we cannot derive God's infinity from experience. We can experience in the highest degree our inner connection with a something greater than ourselves; but that this is an infinite cannot be demonstrated.

All that thought can accomplish in the field of religion can consist only in the arrangement, the determination, and the elucidation of aspirations, but not in arousing them. Philosophy is always secondary here. But it can very well be of use. For the religious consciousness always expresses its experiences in forms which are born of the intellectual tradition under the influence of which it is. Consequently, only critical comparison can ascertain the really immediate and essential, and separate it from the local and casual. At the same time, philosophy has the task of expunging views which are decidedly inconsequent, or contradict real experience. What has passed through this purgatory is to be treated as hypo-

thesis, whose justification and significance can become the object of more intimate discussion after reduction to the simplest terms.

So much for the epistemological treatment. Though James is at such pains to make it carry weight, he has even greater interest for the psychological method, and this it is that invests his work with its greatest importance.

The psychology of religion renders great contributions to psychology in general. There are many psychological phenomena which lend themselves particularly well to study in the field of the religious life. Thus James insists that religious phenomena prove how slight is that portion of our intellectual life which we can explain clearly and distinctly. Consciousness becomes blurred through many stages back to the unconscious, or, as James prefers to say, the subconscious. There are immediate motives and presentiments, which often, without our noticing, give us the first premises on which our explicitly conscious thoughts are grounded. Conscious arguments often bestir themselves only on the surface, and an involuntary and immediate assurance is "the deep thing in us." Further, the study of the religious life teaches us the great variety of mankind, both as to the nature of feeling and the degree of susceptibility, a variety to which we otherwise would not have become so attentive. We learn how evolution can advance in ways various in the extreme to one and the same goal, now continuously, now by a leap. Even if taken purely theoretically, or as a natural history, the study of the religious life is of importance.

The psychological method is of further importance for the comprehension of the religious problem. Religious processes appear as special forms of processes which are

known in other psychical fields, and obey laws which also are known to us elsewhere. James here refers to Starbuck's investigations on Conversion in its connection with organic and psychical development during the transition stage. James lays very particular stress upon what is active beneath the "threshold" of consciousness or outside its "margin." He finds it very hard to point here to a definite boundary, and throws over the atomistic psychology which cogitates consciousness as compounded of particular elements fixed and determinate in themselves. At any rate subliminal or ultramarginal influences are continually making themselves felt, and James is prone, for his part, to treat these influences as the way in which a higher order of things takes effect within us. These inner demonstrations may be our nearest, our proper world: we do not belong to the external world so nearly. Here James finds a point of unity for religion and psychology, although he explains every nearer determination of it as an interpretation that can be no longer purely psychological. The interpretation, too, is not decisive; it is always derivative, and one and the same experience can be the object of different religious interpretations.⁵¹ Most men want, especially at this point, criticism and caution, but not faith. They are too prone to let a dogmatic belief follow suddenly every lively idea, especially when assisted by involuntary interest.

The third standpoint, the ethical, comes to hand in the valuation of religious phenomena. James distinguishes just as sharply between description or explanation of the experienced and its value, as he does between experience and interpretation. Even what from a purely medical standpoint is to be called abnormal, can

possess great value on account of its content. The value of a state does not depend on how it arose. When we call certain states higher than others, it is not because of what we believe we know about their organic conditions. If the thought of Saint Theresa includes something of worth, it is all one whether she were hysterical or not. We appreciate a force by its effect, not by its origin.

No speculative or theological system of valuation can be laid down. Here also we must be empirical. We judge religious phenomena by their fruits, and that man, as such, has ever done. The cult of a deity ceases when it has no more effect on the temper, and when, on account of its whole character, it gets into conflict with something whose value we have experienced so fundamentally that we cannot deny it. Mankind is true to those gods whom it can employ, and whose commands ratify the claims which men set themselves and others. We always utilise "human standards." We ask how far the religious life is an ideal form of human life. The standard naturally varies with time, but at one time we have one only. Only the test is always to be essayed again, for under new conditions we may perhaps get to new results. Value, too, is able to have a different outcome for different men. A psychological investigation proves great differences with respect to inner nature among men; so that we must assume that they need different spiritual sustenance, and must differ from one another in religion.

James remains decidedly sympathetic with religion in general. The best points of religious experience are, he is convinced, the best that history has to show. Here he feels the earnestness and energy of the inner life acting with power and concentration as against all that can be

hindered and wasted. It is as if one were raised to a higher and a purer atmosphere. James here cites Saint-Beuve's appreciation of religious personalities in his famous work on Port Royal.

We find in James the three main standpoints for the philosophical discussion of religious questions. He announces that he will oppose, in a later work, the efforts even now being made to treat the philosophy of religion more speculatively—efforts more variously copious in England and America than on the Continent. In the meantime, his work bears weighty testimony that just these three standpoints are to be found in the philosophy of religion. Unfortunately I cannot do justice, in my sketch of James, to the frankness, the freshness, the art of expression that stand at the author's disposal.

B. THE NATURE OF RELIGIOUS EXPERIENCE

The religious feeling is, according to James, neither a special nor an elementary feeling. Every feeling can, under certain conditions, have a religious character, if it agrees, namely, with the conclusion of human experience which James calls the "total reaction upon life." What the feeling is, is somewhat more closely defined by saying that religion is one of the ways in which unity may come into our life. Unity, says James, is accompanied by a feeling of pleasure and happiness, which surpasses all that we can otherwise experience. This unity can be attained suddenly, or by a long evolution; here individual differences come out. The main fact is, however, that the individual who formerly felt himself partial and restricted, debased and unhappy, now has the feeling of harmony, freedom and elevation. Thoughts which

formerly stood at the periphery of the soul as ideal possibilities, have now become its central attributes. It is as if new energy flowed to the individual from sources outside the soul which he was incapable by conscious effort directly to unseal. The "hopeless inferiority of voluntary to instinctive action" is a mark of all religious states. Morbid forms arise when there is need of intellectual power and interest to fashion and illuminate such experiences.

Religious experience has a mystical character, partly by reason of its ineffability, since in it direct comprehension of other men is impossible, partly by reason of its immediacy, for discursive thought plays no part in it, partly on account of the short duration of the situation, or on account of the difficulties of recalling it to memory, in part, finally, because of the passive relation in which the individual stands to these experiences. The non-religious consciousness knows similar situations. The religious character arises, as we have remarked, through man's relation to life as a whole coming to a settlement in such states, which have a unity and an energy otherwise lacking. Mysticism, strictly so called, is only a certain, often an extreme form of what comes out in all religious experience.

C. THE MOST IMPORTANT TYPES

James explains that the most important result he has attained by his investigations of the religious consciousness, is the great variety that presents itself. Thus an important part of his work aims quite naturally at referring these variations to certain types.

There is one contrast in especial which he very

strongly emphasises, that, namely, between the morbid and the healthy temperaments, or, to use an expression borrowed from Francis Newman, "between the once-born and the twice-born." Sick souls need a change, a crisis, a conversion, in order to reach unity and joy, while there are healthy souls which reach them through immediate unfolding and devotion. The religion of the healthy James calls Naturalism, that of the sick, Salvationism. But in both these groups the greatest variety of personalities and tendencies may crop up again.

The religion of healthy souls is an enthusiasm which lingers on the bright side of existence, and explains the dark side perhaps even as illusory. Even when these souls do not lack an eye for the restricted and the gloomy, they are yet convinced that this can be overcome, so great is their immediate belief in the inner energy and harmony that dominate the universe. This tendency appears more in Hellenism than in Christianity, in Catholicism more than in Protestantism, in the Latin races more than in the Teutonic. In modern times it comes out in Spinoza and Rousseau, in all liberal expression of Christianity, especially in Unitarianism (Emerson, Parker). In America, it is sharply contrasted with Methodism and Revivalism. In our own days, what is called the mind-cure movement is a characteristic example. It heals both soul and body, continually suggesting and consistently thinking that pain is an illusion, and in reality all is bright and splendid. Fear and sorrow are banned. It works by suggestion, and not least by auto-suggestion. By continually cheering for the universe, one is strengthened in the belief that the universe deserves a cheer.

The morbid soul admits pain and discord. The threshold of consciousness is lowered for this sort of experience once for all, whereas the healthy soul has raised it. The world seems empty and vain. Men fear what life's course shall bring. The soul feels that it is sinful and corrupted. The feeling of vanity, of fear, of sinfulness, are the three main forms of infirmity of soul. With Tolstoi the feeling of vanity is dominant, with Bunyan that of fear and sin. There is here a primitive disharmony of temperament, which demands a second birth. Even when this is attained, natures of this sort will, with difficulty, obtain the overflowing life-feeling which the healthy possess.

Naturally there is in the world a medley of transition forms between the two types. But in their extreme forms they offer so great a contrast that they hardly understand each other. They want to treat each its own view of life as the only right one. Thus Wesley maintained that conversion was the only road to peace, while Emerson attached greater value to those natures which were in need of one birth only than to those which, with devils within them, were constrained to undergo a hard fight. James himself is of opinion that the vital experience upon which the twice-born can rely is deeper and more complete than that of the first type. No prophet could bring men a decisive message without saying things which such men as Bunyan and Tolstoi could resound as realities. The most perfect religions must be those which both know and overcome the gloomiest elements of life. Hence the superiority of Buddhism and Christianity.

Compared with this great contrast, the other demonstrable contrasts are, for James, only of minor

importance. Thus the contrast between development *per saltum* and *per continuum*—the contrast between natures in which the elements to be overcome must first have lost their vital force, and other natures in which the new life may spring up before the old is altogether done with—and the contrast between a development which calls for conscious effort (even if it does not directly lead to the goal), and a development which always proceeds involuntarily.

On occasion, besides the doctrine of universal types, James also casts light on his own individual beliefs. During a protracted state of nervous relaxation, he sought the aid of the mind-cure movement, and he believes that he found it, though this did not prevent his taking up a critical attitude. When he says that mysticism gives only in extreme form what all religious experience includes, he adds that to him personally mystical states are unknown. His own beliefs he expresses in that, without attaching himself either to orthodox Christianity or to speculative theism, he is convinced that throughout the circumstances in which man feels himself most at one with the highest that he knows, new power arises in the world, and new starting-points are given. So far his belief is supernaturalistic, and accepts the action of a deity within the field of natural experience. He adds that he very well knows that the dominant opinion in academic circles follows the opposite direction. To him, faith in immortality is of subordinate importance (although he has, in a special booklet, sought to show that it cannot be disproved). If only provision be made for our ideals "to all eternity," he does not see why we should not be designed to trust for them to other acts than our own.

D. THE GROUND THOUGHTS OF RELIGION

Although, for James, religion is grounded in feeling and its experiences, and although it appears under forms of the greatest diversity, there is yet a basic thought or hypothesis always at the root of it. This is the hypothesis that a state of harmony, unity, and peace can be attained, even if it can come about only through struggle and crisis, and that this goal will be reached by an addition of energy from a more comprehensive order of things, which, psychologically treated, is expressed in our unconscious nature. How we arrange the details of this event is unessential; purely individual amplifications and over-beliefs will always be added. The main fact is that, to the religious consciousness, tragedy, no matter how often it may occur in the course of life, is always only temporary and partial. Shipwreck and dissolution are not the last words of existence. All religion finally proceeds from a cosmic hypothesis. On the other hand, the maintenance of religion is not dependent on any special dogmatic assumption whatsoever. Naturally, if we identify religion with an animistic view of the world, or if it can be completely dependent on such a view, its days are numbered with the dying out of animism; so with magic and fetishism. James thinks that the contest over this may easily become a contest over mere words. It is for him decisive that the inner experiences upon which religion is really built up are the most concrete and immediate experiences which we possess. Compared with this, all that we are capable of experiencing concerning the external relations of the world has an abstract and general character. There is no ground for the assumption that the time of such experiences has

gone by, even if they must be cut off from connection with elements, to amalgamate with which they were formerly prone.

E. REMARKS ON JAMES'S PHILOSOPHY OF RELIGION

The study of James's work, which appeared a year after my own attempt in the philosophy of religion, has been of great interest to me. Not only is it long since I have read a book which taught me to regard life and man with fresh eyes, so much as this of the American philosopher, but it was particularly important for me in that the whole line and method of treatment, in spite of variations in unessential points (*e.g.* in reference to what James calls his "Supranaturalism"), is so nearly related to my own. I have thus a personal ground for directing attention to the work. The brilliant form and manifold particulars make the study worth while, even to one who is further from agreeing with him than I.⁵² I will here put forward only a few remarks in order to define my standpoint in respect to him.

In my view, James is completely right in his distinction between personal and institutional religion. It is, of course, a distinction easier to make in the higher than in the lower religions, and that, perhaps, is why the historians of religion have striven against its admission. But, at any rate, the psychological interest must concern the personal element of religion, while the more objective or "institutional" aspect is significant only as a symptom. The main fact is, indeed, that the religious problem is concerned peculiarly with the subjective side. The question as to the—present and future—place of religion in the spiritual life of man depends, above all, only on

whether the feeling and need of man are capable of holding fast to the forms previously given, and whether new ones can be discovered and fashioned if these show themselves to be unsatisfactory. Whoever regards the continuity of spiritual evolution must lay decidedly the greatest stress on the subjective, personal religion, however much this is veiled by the preponderance of external forms.

But it seems to me that James passes far too lightly over the difficulties which the problem of continuity here offers. It is by no means self-evident that the personal element of religion can be retained when the historical forms disappear. As you may see from my own *Philosophy of Religion*, my view is, that I see the possibility of maintaining the fervour and concentration of the view of life which has had such an essential support in the historical forms of religion, although I can adduce no compelling proof of the necessity, even of equivalents being possible. We are face to face with the possibility that values may go astray here. History shows us an increasing reciprocation of the personal and the institutional. The future maintenance of this reciprocation is possible only if the human spirit, during the course of its development, retains the capacity of discovering or framing great symbols for its deepest life-experiences; symbols which can have a common significance for greater or less groups of men. This is to be hoped, but cannot be proved. And yet this is one of the weightiest questions that concerns the future of our race. We must regard the greatest conflicts of life very light-heartedly or very obscurely if we have not felt the sting of this problem. Whether under new conditions we may continue to employ the word "religion" is an

indifferent question, which James treats with merited irony.

If James's description of religious experience be compared with mine, an agreement comes out, which shows that we both have the same phenomena in view. Religious experience is for him characterised by being the "total reaction" of man upon life; it is an experience of peace, unity, and energy, often obtained by a crisis, which leads to the supersession of darkness and discord. Here I miss a determinate emphasis on the fact that the discord, for the supersession of which all forms of the religious consciousness strive, is a discord between value and reality. By the relation of the value which man knows to the reality which he knows, is his religion determined. The valuable for him may be physical life in its maintenance and development, but it may also be ideal good. His total feeling towards life will always be determined by whether the heaven of value is clouded or not. From this point of view, I reached my hypothesis that the maintenance of value is the fundamental thought of religion or the religious axiom. James lays stress on the inner feeling of unity, and on the experience of the influx of inner energy, without sufficiently allowing for how this unity and climax of energy can be significant for men, in removing the discord of value and reality. Yet I do not believe that James differs from me in respect of my hypothesis. As already mentioned, he does indeed show that religion rests mainly upon subjective experience, but that it relies more or less on the presupposition that the tragedy of the world may be only partial and temporary, that shipwreck and destruction are not the last words of existence. The religious consciousness must also, as a consequence of

its nature, presuppose something of cosmic relations of the inner nature of existence. This is the point at which religion has always been prone to pass over into metaphysic, as inversely, metaphysic, without being always conscious of the fact, has started in its constructions from religious presuppositions. According to James, every attempt after a more determinate and concrete formulation of these ultimate presuppositions is "over-belief"—*i.e.* leads from the region of thought and experience into that of fancy and mysticism. James's own "supranaturalism" is a clear example. Of the new beginnings which he assumes, he is justified in saying no more than that their causes cannot be given for the present; that they must have a "supranatural" cause is not suggested by his own views.

There is yet another essential point in which I agree with James, namely, the great emphasis which he lays on individual differences with regard to religious experience and religious belief. His masterly delineation of the contrast between the way in which the healthy and the morbid souls grasp the facts, carries with it an important advocacy of what I call the principle of personality. This contrast corresponds to that which I brought forward between expansive and discordant natures (*Philosophy of Religion*, §§ 36-37, cf. § 94). But James has carried the treatment through with such power and clarity, that the question whether different personalities can have really "the same" religion, introduces itself with still greater necessity than before.

II. LECTURES ON BERGSON

I

THE PROBLEM OF PHILOSOPHY

DURING the last part of the nineteenth century the doctrine of evolution has penetrated the different branches of science, and has furnished new ideas regarding the origin and value of knowledge. When Goethe's Faust, discontented with the customary translation of the first line of St. John's Gospel, substitutes the word "Thought" for "Word," then, reflecting that it is neither Thought nor Idea that is all-creating, finally utters the words, "In the beginning was Activity," he expresses the very principle of evolution. Every thought, every idea of ours, is born of the discipline of reality, exercised through the actions which it compels us to accomplish. The value of science is grounded on the fact that it is a realisation of the hypotheses from which men must start in order that their actions may lead them to the results which they desire to attain. Practical necessity is the basis of theoretical necessity, and proves its value. After the discussions raised by the theory of evolution had died down, what has been called Pragmatism developed this thought from the standpoint of psychology and history.

M. Henri Bergson, too, has accepted it, but has refused to accept the conclusions that have been drawn

from it. The necessity of arranging representations in a certain manner is, in his view, no proof whatsoever of the validity of the knowledge thus attained. For him it is in fact just the opposite. Far from practice leading to exact theory, the necessities of existence, the struggle for life in all its forms, the continuous effort to compel things to the service of man, produce a mechanical, external way of thought, a parcelling out, a dispersion which prevents our perceiving the inner connectedness of existence.

In its struggle with the purely material, thought finds itself deformed by its object, and is dominated by spatial ideas ; it gets into the way of understanding everything as it does spatial relations, and of supposing that there are, between representations, relations equally external with those existing in space between different places and different objects. Connections are, then, only external. Also language, the necessity of expressing thought in words, thrusts us into this path. Each thing and each property being designated by words, we come to think that they are as much separate as the words are themselves.

Not only are the natural sciences, the knowledge of matter, subject to this influence, but also philosophy. M. Bergson discovers this subjection in Greek philosophy, and he is convinced that modern philosophy has not, from this point of view, freed itself from ancient ; I shall return to this point in the sequel. The oldest Greek philosophy was very much taken up with intuition as representing things immediately ; it believed that sensible elements were able, by a transformation or change, to pass into other elements. But, with Parmenides the Eleatic, philosophy entered upon the

path which it has never since deserted. The way in which the Eleatics criticised the concept of change, and affirmed that only the immutable was capable of being truly known, resulted in importance being centred solely in the pure concept, at the expense of intuition; the habit arose of moving in the world of abstractions, generalisations, and conclusions, instead of penetrating the content of perception and immediate consciousness. In his philosophy of ideas, Plato regards pure concepts as the inner essence of existence, as against the continual change to which the world of experience and the intuition of the senses is subjected.⁵³ And, according to M. Bergson, philosophy has ever since taken the same direction.

Thence is born, he proceeds, a great error as to the signification of philosophy, which has extended over its entire history. Its task consists, he affirms, precisely in liberating thought and spiritual life from its penchant for the immutable, for the continually recurring, for the fixed and mechanical, which is prompted by the habit of according practical treatment to material things. Up to the present, science and philosophy have been subservient to a practical end, and consequently have continually renewed their vain endeavours to understand change with the unchangeable for their starting-point, and the perceptible from the standpoint of the pure concept. Philosophy has for its true task the rediscovery of the immediate unity and inner continuity of our soul-life, from which the practical life, waited on by language and the natural sciences, alienates us. Thought-life must become completely disinterested in order to arrive at the solution of this problem, in order to discover what it is that is really

given, to distinguish the foundation from what the tongue tries to express, from what science seeks to formulate.

The title of that work of M. Bergson's which first attracted attention, and which I continue to regard as his best book, his *Essai sur les données immédiates de la conscience* (1889), is very characteristic of this point of view.

M. Henri Bergson was born at Paris in 1859, so that his most important work appeared when he was thirty. We have no intimate details of his life. His works mark the stages of his existence. After leaving the *École Normale*, he became a professor in provincial and Parisian *lycées*, then taught at the *École Normale* from 1898 till 1900; since the year 1900 he has held a chair at the *Collège de France*.

He is a brilliant, often a dazzling, writer, and he should be a remarkable speaker. His lectures are very popular; it seems that attendance at them has become a fashion among the thinking members of good society. He has never sought this kind of success. Outwardly, his person gives an impression of tranquillity; his countenance is delicate and pleasing. I recall with pleasure the conversation which we had together at Paris some years ago, on philosophical subjects. I had already made known the differences which separate me from him in a historical sketch; recently, in my book *Den menneskelige Tanke* ("Human Thought"), I have examined and criticised several points of his doctrine.⁵⁴

As is evident from the foregoing, M. Bergson's thought marks a reaction against rationalism and realism, a reaction which is manifest in very different regions

at the present day. Some have perhaps already passed judgment upon M. Bergson at the very sound of the word reaction. But a reaction may be fully justified when it becomes necessary to adopt new points of view, or when old points of view, which have been put away for a certain time, reaffirm their utility. The history of thought shows that it advances amidst a perpetual conflict of actions and reactions which arise out of each other and indirectly supplement each other.

Synthesis and analysis, continuity and discontinuity, unity and multiplicity, intuition and reflection, the spontaneous intelligence of things and conscious observation, these different directions must be continually acting upon each other; but this mutual influence only takes place if now the one, now the other, becomes dominant. There are causes, whether inner or outer, which determine the outstanding tendencies of an epoch. At one moment, an intellectual aspiration of a certain order demands satisfaction, at another, fresh observations take different forms and propound other problems than those which have been examined up to that time. I propose, in what follows, to inquire how it stands with M. Bergson in this respect.

He sets out his thoughts with an eloquence which has greatly contributed to arouse attention and to gain adherents for him, but at the same time the current trend of ideas carries thinkers in his direction. Catholicism and its opposite Syndicalism both evidence sympathy for him.

It must be said at once that the basis of his thought and the exactitude of his expression are not on a level with his style. Besides, an essential difficulty is encountered from the first in a philosophy like that of

M. Bergson. If, as he affirms, both the scientific labour of thought and the language suffer from a radical imperfection, on account of their having been created for a practical end, what expressions, what forms of thought can we employ in order to represent and develop that superior intelligence of things towards which M. Bergson wishes to lead us ?

No one denies that reflection ought always to build, and in fact does build on the foundation of intuition, whether intuition be taken to mean sensation, memory, or imagination. And it is thinkable that our faculty of intuition were so extensive and so mobile that it were capable of operating in the most satisfactory manner without the analysing and abstracting intervention of reflection. I have treated this possibility in my book *Human Thought*, but I hastened to add that it did not represent the fact. For the objects and elements which form the content of intuition to appear in all their clearness and with their foundation, a comparison and a conscious and continuous rearrangement are necessary. The blind, spontaneous, and unconscious way in which the objects and elements interweave in immediate experience displays itself as empirically unsatisfactory. Even if we agree with Goethe and remain in immediate intuition as long as possible, not allowing reflection and judgment to begin their dissolving work too soon, yet a moment must come, if intellectual development is not arrested, when their work must begin.⁵⁵

Bergson, like Goethe, attaches great value to intuition and regards reflection as an imperfection. "If our senses and our consciousness had an unlimited range, if our faculty of perception, inner or outer, were in-

definite, we should never have recourse to the faculty of conception or to that of reason. Conception is a *pis aller* in the cases where perception is impossible, and reason only supervenes in proportion as the empty spaces of inner or outer perception must be filled up, and its range extended. I do not deny the utility of abstract and general ideas, any more than I contest the value of bank notes. But just as the note is only a promise of gold, so a conception has no value save in virtue of the eventual perceptions which it represents. I say that we are agreed on that point. And this is proved by the universal opinion that the most ingeniously assembled conceptions and the most skilfully constructed reasonings fall to pieces like card castles as soon as a fact—a single perceived fact—happens to run counter to these conceptions and these arguments. Moreover, there is not a metaphysician or a theologian who is not ready to affirm that a perfect being is one who knows all things intuitively, without having to go through the intermediary process of reasoning, abstraction, or of generalisation.”⁵⁶

Naturally Bergson recognises that we are not such perfect beings that pure intuition could be sufficient for us. And even if we were superior in this respect to what we are, we should still experience the need of communicating our perceptions to each other, and we should only be able to do so by means of language, which, according to Bergson, is, like science, insufficient. Neither concepts nor images suffice when the immediate content of intuitions is to be rendered; concepts are related to each other externally, and each of them expresses only a single side or a single property of that of which we have become conscious through intuition;

nor does any image exhaust its content. The image has, however, this advantage over the concept, that it gives something individual and concrete, and Bergson exhorts us to make use of it. Try, says he, to think of yourself, of your own inner life such as it is displayed in time, of your own changing states. Different images may then arise. They will not be sufficient any more, but perhaps they will all tend in the same direction. There will be, for instance, an opposition between the outer crust and the inner layers. But this image does not leave place for the continuity of flow (*continuité d'écoulement*). Or it is as if something were being unwound inside you, like a reel, or, on the contrary, as if something were being wound up in you. Further, this image itself is incomplete, because what is being wound or unwound appears homogeneous, and seems to be extended in space. Look at the image of the spectrum, with its thousand nuances. The colours are different from each other, and yet they are connected; but here the undulation shown directly by internal observation fails. No image, then, is sufficient. But all those that have been aroused point in the same direction. And through the very fact that each image is a cripple, but that all indicate the same direction, an impulse may be excited, a need awakened, the need of personal action to cause the emergence of an inner state or an attitude of such a nature that the speaker desires his listener to penetrate it. An absolutely immediate experience can only be provoked indirectly. It is only by personal activity, by an act of volition, that we find ourselves face to face with what is most immediate and most spontaneous in our inner life, with that to which philosophy desires to lead us.

This description, which is to be found in the *Introduction à la métaphysique*,⁵⁷ is perhaps Bergson's most interesting utterance. He has understood that every profound intellectual impression can only be produced indirectly, and that the provocation of such is an art, just as it is necessary to have at the same time receptivity and the power of action upon oneself, in order to feel the need of finding oneself, and discovering the intimate secrets of one's inner life. Philosophy has been aware of the matter since Socrates' time, but has not always made use of this truth. The systematic spirit and the scholastic spirit have hindered it.

Especial attention must be paid to the conditions which Bergson puts forward as being those of immediate perception, which is for him something superior, but which the practice of life troubles so easily. He has not the remotest intention, as has been said of him, to favour intellectual laziness. There have been young Frenchmen whom Bergson's doctrine has inspired with contempt for scientific work. This work they regard as perhaps necessary for practical people, for engineers, physicians, and so forth, but for philosophers, whose realm begins where science ends, it is necessary to plunge into immediate experiences, into pure intuition. Bergson has rightly protested against this interpretation of his philosophy.⁵⁸ Even when it is a matter of the immediate given (*la donnée immédiate*), which should be accessible to all, provided that one knows how to rid oneself of the practical way of looking at things and of the mechanism of language, which parcels out and divides, still receptivity and effort to return to immediate experiences are necessary, just as there are certain difficulties to surmount in order to express what one has tried in this

way. Thus the "immediate" given is not to be dreamed.

But Bergson does not distinguish very clearly, as I shall show later, between "the immediate given," taken in the sense of which I have just spoken, and intuition, the immediate perception which identifies itself with a total conception, the complement or conclusion of the scientific labour of thought. Inasmuch as he speaks of an intuition of this last sort, it goes without saying that it can only be attained by way of the purgatory of reflection. But there are always people who try to get into Paradise without passing through Purgatory.

In my opinion, as I hope to show in the sketch which I shall give, Bergson rather paves the way towards a sort of artistic perception than towards a higher science. Such a science, no matter how superior it may be, is nevertheless in constant need of concepts and conclusions, of images and comparisons. What is it that guarantees the value of the intuition that shall arise when we have passed through the purifying flame of research? It is psychologically possible that by the indirect road which M. Bergson so well describes an inner movement is stirred up, a deepening and animation in the world of the spirit, but how comes it that something is able to appear which, respecting its value and its connection with the greatest intimacies of existence, is higher than the standpoints and results of science?

By the importance which he attaches to the immediate given, to spontaneous life and perception, set up in opposition to reflection, its forms and its results, M. Henri Bergson recalls a succession of French writers, of whom it cannot otherwise be said but that he has

been influenced by them. He belongs to a type of mind which appears from time to time in the intellectual life of France.

First of all there is Montaigne. Behind his scepticism we find devotion to nature, "notre grande mère nature," which lives spontaneously in us all, and in each according to his disposition. And the nature which is in us and above us cannot express itself through the medium of our limited and determined concepts. Pascal, too, sets the immediate experience of the "heart" in opposition to abstract proof, "the spirit of finesse" in opposition to the "spirit of geometry." The former sees the thing in its essence at once and with a single glance, the latter comprehends it by a series of conclusions. There is in this a similarity to the opposition to which Rousseau reverts so often between nature and culture, sentiment and intelligence, concentration and dispersion. Maine de Biran distinguishes different degrees of spontaneous life — animal life, human life, spiritual life — and he gives a long treatment of *l'homme intérieur*, who cannot express himself in such a way as to be entirely comprehensible. From Maine de Brian, the line followed by the development of this thought passes through Félix Ravaisson, Lachelier, Boutroux, and finally reaches M. Bergson. Bergson's ideas also recall those of Guyau, who was struck by the radiation and expansion of spiritual forces. For him, thought played only a subordinate part. In his poem, "Le Mal du Poète," he depicts the malady from which he is suffering, the impossibility of expressing the fullness of life by images.

Jacobi, Herder, and Hamann, in the history of German philosophy at the beginning of the nineteenth century, hold a corresponding position with respect to

Kant. They assigned the place of honour to the collected and concentrated action of mind, and opposed it to analysis and criticism, just as they opposed the living, concrete connection of things to the cut and dried distinctions of the critical philosophy. And, later on, Friedrich Nietzsche has passionately urged, as against rationalism, the cause of the potent overflow of life.⁵⁹

Such tendencies have this advantage for philosophy, that they recall all that thought is unable to attain, after it has done its best to analyse, distinguish, and bring together the things with which it busies itself. Her thought still draws from an inexhaustible spring. But her courage is not thereby diminished. On the other hand, she can draw from the fact this consolation, that she will never be at a loss for problems.

The greatest figures of French philosophy, Descartes and Comte, do not belong to this type. The last word of philosophy must always be the rights and authority of thought, and these do not necessarily carry with them ignorance of the multiplicity of life. The direction indicated by Comte is followed at present by the French philosopher Durkheim. We may regard as the representatives of the Cartesian rationalist school, besides M. Émile Boutroux, two savants whom we have lately lost, Alfred Fouillée and the mathematician and philosopher Henri Poincaré. M. Bergson opposes both tendencies impartially. In the sequel we are going to examine what are the principles which serve as the basis of his philosophy.

II

INTUITION

THERE is, according to Bergson, a strong opposition between that which arises spontaneously and involuntarily, in and for consciousness, and that which reflection distinguishes, separates, and finally seeks to recombine. Before and above all division and all connection, there is a continuous stream of things which we have lived, of inner transformations in an uninterrupted, living continuity, which forms the necessary foundation upon which reflection can unroll itself, and is, at the same time, the ideal to which, after the work of reflection, we seek to return, when it is time to bring our thought-activity to an end.

Intuition, which, for Bergson, signifies penetration into the spontaneous and moving whole, is, in his view, at once the basis and the conclusion of intellectual work. And I cannot help allowing that there is here an incontestable obscurity with regard to the relation between intuition as a psychological condition, and intuition as the conclusion of thought, an obscurity which is in part responsible for the misunderstanding to which his philosophy has given rise.

Since his first work, Bergson has posed as the adversary of ideas which have exercised a great influence

upon philosophy, and especially upon psychology, in the last generation. They are those which inspired the English association-psychology, and brought fame to Hume, James Mill, J. S. Mill, and Herbert Spencer. This philosophy had the great merit of originating a more scientific psychology, because it comprehended the soul-life as composed of a mass of elements, sensations, ideas, sentiments, appetites, which are independent of each other, and can only be more intimately bound together in an external manner, and especially by the fact that they often appear together. The life of the soul is a chaos which only forms an ordered whole by force of habit. This theory has been very effectual in causing the abandonment of the vague description and mystic allusions of the soul-life. It has ever since been easier to determine the psychological questions that have arisen. It has brought psychology into a closer relation with the natural sciences. But it has confounded its theoretical and abstract opinions with what the observation of spiritual life teaches us, and it has ignored the fact that none of the elements of the soul can be comprehended in itself, but only in its connection with the other spiritual elements, and under the influence of their reciprocal action. In general, the elements as such are always products of analysis and reflection, and are not to be confused with that which is offered by the spontaneous life of the soul.

This conception has been opposed both in and out of England. Among opposing works mention must be made in the first place of the *Physiological Psychology* of Wundt (1874), in which he insists on the importance of apperception for the development of spiritual life. In the same year appeared the *Introduction to Hume* of

Thomas Hill Green, which contained a vigorous criticism of the principles from which the most celebrated representative of the "association-psychology" had started out. In this year, too, I published my book, *Den engelske Filosofi i vor Tid* ("Recent English Philosophy," German translation), in which I sketched, by certain critical remarks, the conception which I put forward in my *Psychology* (1882), taking especially as my foundation the relations between healthy life and the life of sickness. In England, the *Ethical Studies* of Francis Herbert Bradley (1876) marked the rupture with the traditional English school.⁶⁰ In the domain of descriptive psychology, William James's essay on the stream of thought ("The Stream of Thought," *Mind*, 1884), which now forms the ninth chapter of his *Principles of Psychology*, marked an epoch by the brilliant description which he gave of the continuity of spiritual life, the foundation of all self-observation and of all psychological analysis.

Bergson is not, then, the first to criticise the employment of purely mechanical analogies in reference to spiritual life and to desire the ascription of its whole due to the real given; but he has done it with a force and an art of exposition which puts him, in this respect, far above all his predecessors in his main work, the thought of which we are going to reconstruct, *Les Données immédiates de la conscience* (1889).

When we free ourselves from the spatial and mechanical representations which have entered into mental science from natural science, we discover that the life of our soul flows and glides like the current of a river. It is passed in time and not in space. One state penetrates another, perhaps even when it is a state of a precisely

opposite kind. It is not a homogeneous current; qualitative changes are for ever at work in it. One colour sensation replaces another colour sensation, pain replaces joy, attention replaces apathy, tension repose, something large something small, and so on. And these experiences are not understood each in relation to its context. They are not separated from each other as are the objects which belong to the external world, each of which has its position in space.

It follows that the facts of the spiritual life are not measured immediately, as happens in space. We could not decide whether two perceptions were equally strong. We can neither add perceptions nor subtract them. When we say that we measure them, we compare them according to their external causes, just as we measure our sensations of heat with the help of the thermometer. The concept of size has no part in mental science, but belongs to the science of material phenomena. In the struggle to maintain physical life, it is of the highest importance to be able to count, measure, weigh, and the greatness of the natural sciences consists in their having been able to introduce quantitative ways of looking at everything that belongs to the material world. But the work which they accomplish is called forth by the practical necessities of life, and always remains at their service.

The attempt made by Fechner to measure psychical phenomena becomes, in consequence of this treatment, an object of Bergson's criticism. It is directed solely against the difficulty of finding psychical unities, that is to say, perceptions sufficiently simple to replace each other exactly, less simple perceptions coming to be regarded as totals of perceptions. This argument is

not new ; as Bergson himself says, it was used as early as 1875 by the mathematician Jules Tannéry,⁶¹ and its justice is generally allowed. Bergson expresses his thought strikingly in the words : “ The essential, and as I think the only question, is to know whether a contrast AB, made up of the elements A and B, is really equal to a contrast BC, differently composed. The day on which it is established that two sensations can be equal without being identical will witness the foundation of psychophysics.”

There are other things in Fechner’s researches which Bergson neglects, although they might be useful to his thesis. I refer to the manner in which Fechner proves experimentally that a perception has not an absolute size, which is the same in all relations, but that the size and the force which it appears to have depend on those relations or rather on the relations of the causes which correspond to it with the previous or simultaneous actions which it has undergone.

To this might be added that even in the material world all measurement depends on an analogy, namely the application of number to spatial phenomena, and here also it would be impossible to point out a unity which is absolutely invariable in all circumstances.

A significant property of all psychic phenomena, when they appear in their entire and perfect immediacy, is that they all unfold in time. Thus the concept of time also plays an essential part in Bergson’s philosophy. This concept has also a great importance in natural science, which is more and more becoming a doctrine of movement. But it is precisely in this that Bergson discovers the fatal point where material analogies borrowed from the natural sciences have effected an

entrance into psychological science. Time, he says, is divided into moments, by a procedure belonging to the natural sciences, and then each moment is understood as a place or a little extension. In the natural sciences, two times are called equal when similar bodies, similarly circumstanced, have traversed equal distances. Space, then, takes the place of time; or rather psychological time is replaced by mechanical or geometrical time. In psychological time, the time in which we really live, and in which we live the veritable content of our life, each moment has its own peculiar nature; it is taken up in a particular manner, and consequently no moment is altogether the same as any other. Bergson calls psychological time *la durée*, or, more exactly, *la durée qualité*, as against *le temps matérialisé* of the natural sciences, which can be symbolised by a spatial extension.

The tendency to make use of images taken from space when wishing to speak of the facts of our inner life, is produced, according to Bergson, not only by the usage of the sciences and by the nature of work performed with a practical aim, but also by the simple need of expression. Space offers us the best signs and the best symbols for making ourselves understood to each other. "We tend instinctively to solidify our impressions in order to express them in language. Thence comes it that we confuse the sentiment itself, which is in a perpetual development, with its permanent external object, and especially with the word which expresses this object." In space we have a form common to us all, commensurable and clearly determined. In the intuition of a homogeneous space, we are already on the road to the social life.⁶² We have a schema by the aid of which we can order what we wish to express and make it clear.

If on the other hand we wish to try and see what is really given, we must get rid of all quantitative determinations and all symbols.

This idea, brilliantly developed by Bergson, contains a good deal that is justified. He has the great merit of having, by his illuminating description of the properties of psychical states, brought clearly to light the differences between them and the other provinces of our experience. We must, however, pass some criticisms before proceeding. He is of opinion that we are able to count only what is localised in different parts of space. But indeed we can count differences of quality; I can enumerate my thoughts and my different dispositions in a fairly short time. Holberg's *Inconstant* has fifteen humours in the course of an hour. The concept of number certainly presupposes discontinuity, but not necessarily spatial discontinuity. According to Bergson himself, the immediate given is neither homogeneous nor invariable; it is always displaying fresh differences, and that is in itself a sufficient basis on which to apply the concept of number. It is easy to imagine beings who are ignorant of space relations, and yet have formed the concept of number. In brief, we can always count our own thoughts and our acts of attention.⁶³

Bergson displays such exclusiveness in his expression of this idea simply because he makes too great and too external a difference between the immediate given and the psychical activity. Nothing is given to us, no subject arises, without psychical activity, whether we notice it or whether we do not. When an immediate given (a subject) is contrasted with the activity in virtue of which it is transformed by analysis and abstraction, it does not mean that this given is not itself partly due to a

preceding psychological activity. For the given to appear, it must in general be supposed that there has been attention. It is concentrated to form a sort of totality by force of the same process that, at a higher stage of consciousness, takes place when we gather up disparate observations and make a whole of them. If certain elements of the given display themselves with greater force than others, it is due in part to an effect of contrast, in part to the greater or less degree of feeling by which it is accompanied. It happens that, under these circumstances, the character of our images, our recollections, and the creations of our imagination, changes involuntarily in such a way that it is often only long afterwards that we become conscious of these changes. This is why I said in my book on *Human Thought* that what might be called the immediate given only merits this name by its relation to a certain determinate activity, while, from other points of view, and compared with other subjects, it ought clearly to be regarded as an activity.

If there were between subject and reflection the opposition which Bergson imagines there is, it would in general be impossible for reflection to arise, as consequently it would be impossible to describe the immediate given. It would be as if there were in us two persons, of whom one possessed the subjects and the other the reflection; they would not understand each other, and would not even find each other out.

It seems to Bergson that there has been a sort of original sin. Misled by the type of jargon that is produced by the practical life, we have turned our backs upon the immediate given, and have devoted ourselves to the abstractions and divisions of reflection.

To find out how this original sin came to be committed, we must have recourse to the book, which Bergson himself regards as his most important work, *L'Évolution créatrice* (1907); with it we pass from psychology to biology.

The original sin was committed when intelligence replaced instinct. Instinct is nearer to life than intelligence. It is a direct continuation of growth, of the process of organisation. When the chick pecks its shell open, it is moved by instinct, and yet it does nothing but continue the movement which has carried through embryonic life. Instinct springs from the activity of life itself. Intelligence only appears when instinct shows itself to be insufficient, and it is then a means of creating instruments. It is as external and mechanical as instinct is organic. Intelligence moves around its object, and tries to discover as many different points of view as possible, but is not able to confine itself entirely to this object. It attracts the object, instead of penetrating it. Instinct and intelligence are in the most absolute opposition to each other. Intelligence may perhaps explain many derivative instincts, but it can never give a complete analysis of the essence of instinct; it is too formal for that. Instinct cannot be extracted from the concepts of intelligence. Here continuity is confronted by discontinuity. There are in the world many things which intelligence alone is capable of seeking, but which it cannot find. Instinct would find them, but never looks for them.

If the consciousness which slumbers in instinct, says Bergson, were to wake up, if it internalised itself in knowledge instead of externalising itself in action, if we knew how to question it and if it knew how to reply, it

would deliver to our keeping the most intimate secrets of life.⁶⁴ But the force of life has carried on the development of intelligence, so as to be furnished with instruments and means which should permit her to attain whatsoever she would, and thus it is that the most fatal step was taken.

This idea of Bergson's respecting the relations of instinct and intelligence prompts the spontaneous remark that we have no right to expect from instinct any more than from intelligence light upon the riddles of life. If Bergson is right in affirming that intelligence is practical, the same can be said in the same measure of instinct. For to be practical means to go straight to the goal whenever possible, instead of making useless detours. Instinct and intelligence are two different ways of attaining a goal and each corresponds to determinate circumstances of life. We have no reason for seeking any mystic peculiarity in instinct. It must indeed be supposed that in instinct a need is stirring, but just because "consciousness is sleeping" it is a blind need which cannot reveal any secret to us.

Bergson supposes that there is a certain analogy between instinct and intuition. Intuition is "a disinterested instinct."⁶⁵ But, given that intuition may be called an instinct, on account of its spontaneous operation, it does not follow that instinct can be regarded as an intuition, and this is its only claim to a mystical character. In itself, it is as much the slave of the practical aspect of life as "intelligence." And if instinct can become disinterested and free itself from its servitude to a practical end, why should not "intelligence" be able to do the same? And is not the work of thought also a kind of life which, if it could become conscious

of itself and its laws, would throw light on the essence of life and its conditions? Life moves in all stages, in thought as well as in instinct and the process of organisation. And everywhere action and spontaneous effort take precedence of reflection and clear consciousness.

Just as there was no foundation and justification from the psychological point of view for putting "the immediate given" in absolute opposition to reflection, so there is no possibility of absolutely opposing instinct and intelligence, of regarding instinct as nearer than intelligence to the inner essence of life.

To the question whether there is not some hope of redemption after the original sin, Bergson replies that we must labour to rid ourselves of the stamp of practical interest which life *dans l'extérieur et le matériel* carries with it. He has already formulated this necessity in his *Introduction à la métaphysique*, and in that one of his works which treats of the philosophy of nature, *L'Évolution créatrice*, he repeats it with respect to the relation between instinct and intelligence. It requires an effort of will to conform to this need; for the practical necessities of life, at the disposal of which intelligence is, have determined our way of thinking (*la pente naturelle de l'intelligence*) to such a degree that we have to struggle against the stream to free ourselves from the external and mechanical manner of regarding existence which is habitual to us. We must, by an act of volition, break with our scientific habits, with the fundamental exigencies of thought itself, if we wish to attain the amplification of our understanding, that perception in which we shall be face to face with the inner essence of existence, the perception to which it is the foremost task of philosophy to lead us.

However, "intelligence" and its way of thought are but an obstacle in our ascent towards intuition, our supreme goal. Had intelligence not been awakened, and had it not done its work, development would never have passed beyond the pure instinct which points the way immediately and exclusively in a single direction. The mobility of intelligence, and the orientation in the world around us to which it leads, foster the growth of forces which may one day be turned within and employed in realising the conditions necessary to immediate perception, which, in instinct, does not get beyond the sleep stage, because the need for movement makes itself felt immediately. Then instinct may be delivered from this need, become entirely disinterested, and, with the help of intellectual sympathy, plunge into the stream which flows within us, and identify itself with that current which traverses the whole of our existence, of which we are one of the articulations. It is a larger world into which we are introduced, a world from which intelligence, by reason of its determinate problems, has been expelled.⁶⁶

I shall return later to the character and value of the metaphysic which Bergson regards as possible. For the moment it is our business to show that access to the intuition in which, according to him, metaphysic is to be found, is not easy and requires the work of intelligence as its preliminary condition.

Also from the epistemological point of view, he has asserted, considering the matter biologically, there was an ascent from instinct, through intelligence, to intuition. "Intuition is undoubtedly an original operation of the mind, irreducible to the fragmentary and external knowledge, by which our intelligence, in its ordinary

usage, regards things in a series of views from the outside; but it is not necessary to be ignorant that this manner of seizing the real is not natural to us any longer, in the existing state of our thought; in order to obtain it, we ought, then, as often as we can, to prepare ourselves for it by a slow and conscientious analysis, to familiarise ourselves with all the documents which concern the object of our study. This preparation is particularly necessary when general and complex realities are in question, such as life instinct evolution: a precise scientific knowledge of the facts is the preliminary condition of the metaphysical intuition which penetrates its principle." 67

It is clear that there is a great difference between the intuition at which we arrive after having passed through the work of analysis and experience and the "original and immediate intuition" which is the immediate given and presents an undivided continuity, which is thereupon parcelled out by intelligence.⁶⁸ There is a point which remains confused in Bergson, namely whether it is possible to return directly to the original intuition without traversing the long road of intelligence, whether a man in the midst of life can free himself from the interests and customs of the practical life, and rediscover the immediate view of himself and of things. It is the artist who can do this, according to Bergson; I shall return to this point. The artist sees all things in their immediate fullness and in their individuality. But should not this be possible for us all, since there is in all of us something which there is in the artist on the grand scale? It would have been an immense advantage, from the point of view of clearness, had Bergson expressed himself in more precise and

determinate fashion with regard to the relation between intuition as the necessary condition for all psychical activity (or rather its first result) and the intuition which must constitute the summit and conclusion of the work of thought, being as it is the supreme union of instinct and intelligence. Bergson employs the same word for the two things, and a certain confusion is inevitable.

Metaphysical intuition is to be a renaissance of instinct. But this renaissance will change its whole character. Instinct is, as we have seen, as "practical" as intelligence; but now it is to be completely disinterested. And while it is one of the marks of instinct that it finds without seeking (as against intelligence which seeks without finding), the discovery is now to appear as the fruit of a research, although it is only by an act of volition, by a violent effort, by a leap, that the conclusive perception is to be finally attained.

This conclusive perception is, through deepening and amplification, different from the immediate perception of movement and change, which we leave on one side in our analysis and abstractions. The philosopher is centred with all his faculties in the perception of the continual process of which he has the best and nearest example in what he observes within himself, where the past and the present clasp hands immediately.

It is Bergson's endeavour to bring out the immediate and spontaneous states of the spiritual life. They can be in the highest degree different from each other; but by reason of their common characteristics they are for him much nearer than they are in reality.⁶⁹ The spontaneous and immediate perception which appears in sensation, memory, and imagination, the spontaneous and blind combination of need and power which is called

instinct, and the perception which can form the conclusion of a vigorous and complicated work of thought, are, in spite of the analogy between them, three very different psychical phenomena, and doubtful consequences might well be the result if they were not sufficiently distinguished. It is a certain romantic tendency, the same which led Rousseau to pass from culture to nature, that moves Bergson to search into these three phenomena, which are so different from each other.

In the history of philosophy, various senses or forms have been given to intuition, and it is interesting to see whether Bergson's intuition coincides with one of these forms, or whether, on the other hand, it signifies something new.

(1) There is in sensation, memory, and imagination, an immediate perception. As soon as I open my eyes I perceive a sensible image which forms a certain totality. In memory arise anterior facts, as spontaneous images of totality, and in imagination there is a new creation of such images, the rise of which may be as unconscious as the way in which an image of sensation or memory comes into being. From the first there is no very clear distinction between sensation, memory, and imagination; they become mixed and bound up with each other. Critical reflection marks the first distinction between these three acts of immediate apperception, through the fact that the doubtful cases compel us to look for determinate criteria in order to avoid taking one for another, observation for memory, or imagination for either.

Intuition considered in this sense (we may call it *concrete intuition*) has something individual and special, and is in significant contrast to the attentive activity,

so rich in distinctions, which we call analysis, as well as to abstraction, generalisation, and conclusion.

(2) Intuition has also been taken to signify judgment, spontaneous decision. Here intuition does not mean an intuition of an individual whole as in sensation, memory, or imagination, but a certitude or a conviction produced by what is called "natural suggestion" or "natural magic." This is the case when certain principles seem to "follow of themselves," or when one is suddenly convinced of the reality of one's belief, or one experiences a spontaneous confidence in an authority. Intuition in the acceptance of the word, which is the most frequent in conversation, is opposed by Thomas Reid to the criticism of Hume, and by Jacobi and Hamann to the philosophy of Spinoza and Kant. This sort of intuition plays an essential rôle when man forms his own belief and conception of life. It is a spontaneous synthesis of experiences and observations. It may be called *practical intuition*.

While Bergson attaches a great importance to the first kind of intuition, he accords hardly any attention to the second kind, although it makes no less show than instinct and intelligence in practical life, and serves no less than the kinds of intuition which Bergson does describe to nullify the division which reflection produces. In reality, his own "intuition" approaches this one very closely.

(3) There is a third kind of intuition in the immediate comprehension of the difference or identity existing between two images of sensation, memory or imagination, appearing simultaneously or successively. It is an act of thought which takes place in every kind of comparison, and leads us to the conclusion that two sensations or

representations are to be held apart or regarded as identical, so that in the future they may take each other's places. Intuition here means the immediate knowledge of a relation. It is the peculiar step of reflection, which, repeated and followed up, can lead to comprehension and a connected view.

This kind of intuition, which I shall call *analytical intuition*, is not opposed to intelligence, but is on the contrary one of the forms of intellectual activity. Nor is it any more opposed to the intuition of the first kind; it refers to a relation between images and not to the images themselves.

It has been described by Descartes in his *Règles pour la direction de l'esprit*, and by Henri Poincaré in *Science et méthode*. This sort of intuition designates for them the very passage from perception to analysis or to proof, a passage which cannot yet be investigated.⁷⁰

This intuition is not to be found in Bergson, and this fact partly explains his opposition of intuition and intelligence—an opposition which, not without reason, has been called an unfortunate accident in the history of thought.

(4) A fourth kind of intuition is the immediate perception of a connection or a totality which may be acquired by going through a series or a group of members or parts, if one has a certain comprehension of their mutual relations. Thus, the action of following a complicated demonstration, or of observing the connection between different points of view under which one and the same subject can be considered, often becomes the object of a comprehensive glance. Or perhaps some person, whose different qualities we have remarked, whose actions we have observed and thought over

separately, suddenly arises for us in his own individuality. The more the intuition of our third definition has been able to act in the discursive progress of our mind, the clearer and the more sharply defined will the totality appear to us. Even the work of thought, analysis and demonstration, is useful to the intuition of totality, and these two sorts of intuition, that of difference and identity and that of totality, are not directly opposed to each other. The one can mark out the path for the other. The view of the totality is conditioned by the regular connection discovered by the aid of thought. In Descartes as in Poincaré the word intuition is employed not only to mean the passages of detailed thought, but also, in connection with that, to designate the comprehensive glance through which a thought-totality is manifested to consciousness. This kind of intuition may be called *synthetic intuition*.

Spinoza has placed this intuition at the summit of human knowledge. It differs at once from the observation of particular subjects and from the abstract knowledge of the laws which govern their appearance. It sees concrete existence in its individuality, and at the same time as a whole, as a folding together of the general laws by which it has inner connection with the rest of existence. It is for Spinoza the consummation of knowledge, but he has confessed that what he has been enabled to understand by its means amounts to very little.⁷¹ By his description of this kind of intuition he has rather set a great problem, finally insoluble, than given the indications which might lead to its solution. At all events the union of the individual and the general which he demands lies on the borders of science and art.

Bergson's "metaphysical intuition" may recall this

fourth kind of intuition, but it does not insist so strongly on this connection between the activity of thought and the comprehensive view. Metaphysical intuition appears as "deepening and amplifying perception," without our being given the method which will enable us to deepen and amplify. The different sorts of thought-activity and the passages from one to another have no importance; the rational element is thrust on one side; Bergson's metaphysical intuition approaches, then, rather to the second kind of intuition, spontaneous decision, than to the fourth, which we have called synthetic intuition. His intuition can give us the romantic idea of having reconquered something that had been lost, and this rather in spite of intelligence than with its help. As against this, it must be remarked that in so far as synthetic intuition has a scientific significance, its indications are directed forward and not backward. Synthetic intuition becomes possible when concrete intuition is the foundation and reliance is placed at each step on analytical intuition. The richer concrete intuition is, and the more severe the operation of analytical intuition is, the greater the importance of synthetic intuition will be. Were philosophy able to attain the vast conclusions which formed the dreams of the time of the great systems it would be by way of intuitions arrived at in this manner.

While Bergson's psychological intuition (immediate perception) is of decisive importance, and has led him to opportune expressions, he has not given a perfectly clear definition of metaphysical intuition, though he affirms its possibility, and he has not determined its philosophical character.

III

PSYCHOLOGY AND PHYSIOLOGY

BERGSON'S philosophy, and especially his doctrine of intuition, are in great measure directed against the influence of natural upon mental science. It is, then, of peculiar interest to know how he understands the relations of psychology and physiology, of soul and body, for it is here that the connection between the two great branches of human science appears most clearly and determinately. He has dealt with this question in *Matière et mémoire* (1897).

Bergson opens by establishing himself strictly on the ground of the natural sciences. He will hold solely by what is offered by objective observation and what is proved by the methods of the natural sciences. All that takes place in the surrounding world and in my own body, including my brain and my nervous system, consists only of movements of different kinds and degrees. From the external world, movement is spread abroad through our body. It reaches the spinal column and the brain by way of the sense-organs and the nerves, and proceeds into peripheral movements. Our body is an instrument which receives movement from the outside, and restores it to the external world. There

is not, from this point of view, any difference between the brain and the other parts of the body. The brain is merely stronger than the other organs in preserving the action which it has thus received, and does not always reproduce them in movement immediately, but often makes them co-operate in ulterior movements. The body, including the brain, is an instrument of movement, and nothing else. To no degree, in no sense, from no point of view, does it serve to prepare and still less to explain a representation. That which, in our perceptions, can be explained by the action of the brain, includes the actions which are commenced or prepared or occasioned, but not our perceptions themselves. Still less does the activity of the brain comprise any explanation of memory and of higher mental activity. If everything in the brain and outside is movement, it must follow that in movement we must not look for anything else than what is observable. The nervous system has only physical properties, and has no other power than that of receiving, preserving, and continuing movement. Movement alone is sensible to us, and movement can produce nothing but movement. The whole effect of material processes is exhausted by the effort of motive adaptation (*le travail d'adaptation motrice*). If the brain is ill, it is only movements and nothing else that are arrested.⁷²

Explanations of this sort might be expected from a consistent materialistic. But Bergson parts company with materialism when he denies that material movements can produce psychical or conscious life. It is, then, doubly interesting to discover what are, for him, the relations of movement in space, and particularly in different parts of the brain, to the psychical life.

To distinguish and recognise only signifies, for Bergson, in the simplest cases, to observe a difference between what has some significance in respect of our needs, and what has not ; one notices that this difference has been remarked by the fact that movements have resulted from it. But he thinks that this does not lead us beyond the material. Sensation is only a part of matter, or, rather, there is only a difference of degree between perceptions of matter and matter itself. It is indifferent whether we speak of sensation, of perception, or of recognition. There is, as a limiting case, a recognition of which the body is capable "on its own account," without the least intervention of memory ; this is an action, not a representation.

Our body, occupying a part of space, is able, then, to feel and move. Our material existence is a totality of sensations and movements.⁷³

But, one asks involuntarily, if sensation (perception, recognition) is only movement, like everything that belongs to the material side of our existence (*la matérialité de notre existence*), why does Bergson use two words, and distinguish sensation from movement ? He seems to have forgotten his own mistrust regarding language, which, in this instance, must have forged a word too many. That sensations which are not movement exist, cannot be known by external observation, which, as he points out with justice, shows us only movements in space. Here self-observation should appear. It is thanks to it that we distinguish between pain and the bodily distortions through which it is revealed. Were we able to contemplate the brain in its different states, we should only see atomic movements, nothing else. We know from another source that, at the same time as

these movements are being produced, we feel and think.

When Bergson, without more ado, attributes to the body the faculty of distinguishing (feeling, perceiving, recognising) he is in reality gainsaying his first proposition, in which he affirmed that everything in the material world is movement, and that movement can only give movement, or, in other words, in what he calls *discernement*, or sensation, arises the whole of the great problem of the relations of soul and body, under the form of this question: What is the relation between sensation in the sense of movement, and perception as a phenomenon of consciousness (*la perception en tant que consciente*)? He ought, then, to admit that what the brain can explain in our perceptions are the beginnings, or preparations, or suggestions of action, and not our perceptions themselves.⁷⁴

It is often thus in the study of great problems; even if, to all appearances, they have been simplified to their least dimensions, they still remain problems.

Whereas, according to Bergson, there is only a difference of degree between sensation and matter, he maintains that there is a difference of kind between sensation and memory.

It is memory which, for Bergson, realises continuity, the inner connexity of psychical life. We are frequently in a position to observe how much the images of memory grow, and, with time, increase in clearness and importance. We are face to face with the inner stream of which Bergson speaks so often, and which he describes in such taking style. If on many occasions it happens that we discover a greater connexity between external objects than enters into our inner states, the reason is, Bergson

assures us, the inattentiveness of our observation. "If we were to look into ourselves closely, we should see that our memories form a chain of the same sort, and that our *character*, always present at all our decisions, is indeed the actual synthesis of all our past states. In this condensed form our previous psychological life is even more existent for us than the external world, of which we perceive never more than a small part, while here, on the contrary, we make use of the whole of the experiences which we have lived." 75

Instead of opposing matter and soul, as is usual, Bergson opposes perception and memory.

But what is the use of that if "perception," in its elementary form is, as Bergson will have it, purely material? He is right in calling his book *Matière et mémoire*, for perception enters into matter. The question still remains the same: How can consciousness (memory) come out of material movement, or become material movement?

And Bergson ultimately denies that pure, that is to say, absolute, isolated, independent, perceptions exist. Only as a limiting conception, as an ideal case, may we speak of them. They could fill only a single instant; but Bergson denies that time can be decomposed into absolutely simple instants. Contemporary psychology, following in the wake of Fechner, has proved that all perception is determined not only by the actual impression but also by the immediately precedent impressions. The past is here already in operation, and affects the present in such a way that all perception may reasonably be called an elementary memory. It is not only on our resolutions, as Bergson has so strikingly demonstrated, that the past acts, but upon all the facts of

our psychical life. Bergson's criticism of Fechner has carried him too far. Although Fechner did not succeed in his proposition of founding a mathematical psychology, the facts which he brought forward show nevertheless that there is, beyond memory proper, a direct connection between the incidents of our psychical life. Bergson might then have extended his conception of memory as the expression of the connexity of psychical life to the most elementary psychical functions. And he confesses, in fact, that "in concrete perception, memory intervenes." "Concrete perception" is expressly set up in opposition to the ideal perception which would take place in an absolute moment, but which exists "virtually rather than actually" (*en droit plutôt qu'en fait*).⁷⁶

The difference of kind between perception and memory must then be abandoned. That it is possible in general to make a distinction between perception and memory we owe to experience, which enlightens us with deceptions as to the impossibility of basing our action altogether on the representations which arise. All memory has at first, like all perception, a tendency to provoke action. The first form of memory is striving or desire. We begin by believing in all our representations as we do in all our perceptions. In the school of experience we learn to attribute once for all certain of our images to the world of the past, while other representations bring forth our striving, and become ends for us.⁷⁷

Bergson's endeavour to maintain continuity in psychical life as in material nature, by means of the concept of memory in the former, and of movement in the latter instance, must have brought him near to the adoption of Spinoza's hypothesis, according to which there is a relation of proportion or analogy between

consciousness and movement, without, however, consciousness being derivable from movement, or movement from consciousness. The hypothesis offers no solution whatsoever ; but it clearly indicates how we must understand the relation before engaging in further speculations. Bergson regards it as a working hypothesis, and this is an important point, for a hypothesis is primarily justified by the use that can be made of it. It is impossible to reject as an instrument of exhausted value a "working hypothesis" which has, in use, demonstrated its applicability by propounding fresh problems, and agreeing with results already discovered. This hypothesis characterises existence in so far as we can understand it only by following special paths, starting from special suppositions. Bergson recognises still more decisively the value of this hypothesis when he objects that it is no more than "a disguised statement of fact." In what the disguise consists, I do not know ; but a representation of the facts is after all not such a bad beginning for ulterior reflection.⁷⁸

That Bergson does not attach great weight to such a statement accords with the idea that the natural sciences are in bondage to the practical life, and cannot, consequently, add an important contribution to our conception of the world. And yet it is striking that the problem of the relation between mind and matter finds its chief incentive in the fact that out of natural science has emerged a doctrine for which nature is a great continuous sequence and that it is impossible to embrace the whole process of movement all at once ; a fact, moreover, which Bergson has seen quite clearly. He has even contributed a good deal to the establishment of the idea that we have no right to suppose that what takes place

in the brain is anything but movement, and that it is a process of a more or less mystical character. But from this he draws the unjustified conclusion that brain and organism have no significance for conscious life, save in the moments when it intervenes in the material world : moreover, consciousness, according to him, carries on a life of independence, a life which contains many more potentialities than material nature is able to realise.

In a study of soul and body which has lately appeared, Bergson has expressed himself thus : “ One gifted with a view into the interior of a brain in full activity, able to follow the traffic of atoms and to interpret their doings, would doubtless know something of what goes on in the mind, but he would know very little. He would know exactly all that can be expressed by gestures, attitudes, and bodily movements, what the psychic state contains in the way of action approaching accomplishment, or simply nascent : the rest would escape him. As to the thoughts and sentiments being unravelled in the interior of consciousness, he would be in the position of a spectator, who sees all the doings of the actors on the stage, but does not hear a word they say.”

This conception narrows both psychology and physiology. Psychologically, will and action cannot be isolated from the other parts of psychological life. Each minute an action “ is born,” for there is not a sensation nor a sentiment but has its volitional element. Bergson makes a false abstraction when he separates the life of memory from action. He transforms conscious life too much into a dream life. And even in the dream, even in the “ pious ” wishes, which may take the place of the primitively sanguine need of action, the impulses which drive us to action have not entirely disappeared. The

soul is then, to use an expression of Helen Keller's, like a bird flying against the wind. If the instants of action have physiological parallels, all psychic states must equally have them. It ought then to be possible for a competent psychological observer to decipher the cerebral process by way of analogy, though the moments when there is a tendency towards extra-peripheral action are more easily understood than the rest. From the physiological point of view, against the affirmation that there is more in the soul than the body can express, must be placed a saying of Spinoza, the value of which has not lessened with time: "No one has yet learned from experience what the body, regarded merely as body, is able to do in accordance with its own natural laws, or what it cannot do. For no one knows enough about the constitution of the body to examine all its functions." It is precisely here that the great importance of the Spinozistic conception resides; it admonishes both physiology and psychology to continue their work, following up in their respective domains the trace of inner connexity, thus to arrive at the gradual ascent of the way that leads to the understanding of their mutual relations.

In this proposition that the psychical life contains more than the body, which is no more than an instrument for the soul, is ever able to express, Bergson finds the possibility of the immortality of the soul; but he adds that no scientific answer is possible to the question whether this immortality holds good indefinitely, or only for a limited time, a time x . His way of thought agrees here with the hypothesis of which Kant (though he regarded it as but *ein bleyernes Waff*) recommended the employment in the polemic against dogmatic

materialism, and which William James has taken up later. The body is to be considered as a narrow channel in which the current of psychical life is confined, always contracting it, without being able to stop it, or prevent it from joining itself to the great waters of the sea.⁷⁹

IV

THE PHILOSOPHY OF EVOLUTION

It is a sign of the times that nowadays every philosopher has to take up a position with respect to the concept of evolution. It has now achieved its place among the categories or essential forms of thought by the fact of its providing indications whence new problems proceed. We must ask regarding every event and every phenomenon by what stages it has passed into its actual state. It is a special form of the general concept of cause.⁸⁰ A philosophy is essentially characterised by the position which it accords to this concept, and by the way in which it applies it.

Bergson in particular has to accord a preponderant place to this concept. He declares in fact that the immediate given (that which we have before us and of which we are a part when we rid ourselves of the partial, mechanical way of looking at things which the practical life imposes on us), and the intuition at which we arrive—after having passed through the purgatory of thought-labour, both display to us a continual movement, a mobile current in which new properties appear and unfold. For him, all is action and evolution; there is no lifeless existence, nothing fixed, no absolute repose.

But, according to Bergson, the conception of evolution

as it exists in the natural sciences is insufficient. It accords too much importance to external relations. Evolution would in that case be only a collection of elements which were formerly isolated, a sequence of impulses, each of independent origin. There is no question of natural and veritable connexity. This external way of seeing is, for Bergson, a consequence of the origin of the natural sciences and of their problems. They have emerged from the necessities of life, and their end is to assist in the maintenance and development of life. But their object is not the understanding of that very life whose servants they are. They are produced by life under certain determinate conditions, in order to act upon certain determinate things; how then can they comprehend life itself, of which they are merely an expression, and which they regard from a single point of view? They have emerged from it, by the way, in the course of the evolutionary process; how then could they envisage this process in its totality?

Spencer has given this fact of the birth of science, in the course of evolution and the struggle for existence in numberless generations, as a proof of the value of the concepts which form the basis of all scientific activity. Bergson sees in this very fact an objection against the absolute value of these concepts. There is not, he thinks, any reason to believe that those modes of intelligence which, in the course of evolution, have been imposed upon us for practical reasons and under the influence of the necessities of existence are the only ones possible. It may well be that all our psychical powers are not taken up with the practical need. We must then turn to the forces not so taken up, in order to come by a

disinterested higher understanding of life and its laws. There, says Bergson, lies the problem of philosophy.⁸¹

But before undertaking the solution of this problem, he examines the two principal forms that have been taken by the mechanical and external concept of life, which he is opposing.

Life consists in a continual struggle against matter. It is a point to take hold of material things, and appropriating and transforming them. In order to live, one need only be capable of reacting to matter in this way ; it is by no means necessary to understand what life really is. It is not then surprising that our intelligence gets the worst of it here. Pure matter may be understood as composed of parts which together constitute it. In a purely material totality, we have first the parts ; the totality is the simple result of their conjunction.

When, now, the sciences find themselves face to face with a living being, it is natural for them to attempt the application of the same modes under which they considered pure matter. Life is to be only a pure resultant of the union of several parts. Attempts have been made to reduce the knowledge of life to physics and chemistry. This would be very natural if it were merely a matter of reacting upon the living so that it might serve a determined end. All organisation is then understood as a kind of manufacture, and every organism as a machine whose parts and process of construction are to be discovered. “ *Voilà le point de vue de la science !* ” Under the influence of intellectual habit, many men of science have as their ideal the submission of the organism to the mathematical treatment to which they submit our solar system.⁸²

Thus does Bergson describe the mechanical conception

of life; its origin, he thinks, is in the metaphysic of which men speak without being aware that it is metaphysic. He adds a series of considerations which go to prove that life cannot be reduced to a system of physical and chemical processes.

The mechanistic conception cannot explain the continuity of life, the connection of its past and its present. The last stages of the evolution of life are not due to a combination of elements which existed beforehand and which are now assembled for the first time, but they bring with them something altogether new. New qualities may appear which are conditioned by the past, but which cannot be derived from it. By its inner connexion between the new and the old, organic life recalls psychical life. Both are subject to the law that the different stages of evolution are incomparable with each other, and that the series of stages cannot be reversed. The growth of an organism and even the evolution of species in nature follow in determinate order, and cannot be thought in the opposite order. We come back to the difference between the psychological conception of time (*durée vraie*), according to which all moments are qualitatively different, and cannot be taken for each other, and the mechanical conception of time according to which it consists in identical moments, which can, without further ado, be put in each other's places, and which only differ in their ordinal numeral.

The finalist or teleological conception, which supposes a pre-established plan containing in advance all that is to appear to experience in the course of evolution, is as untenable as the mechanistic theory. Here also time is ultimately useless. Nothing new appears. What is shown by experience is only the repetition of what was

contained in the plan. Finalism is only a mechanism reversed.

This conception, too, is born under the influence of practical representations. Life compels us to make plans which we then endeavour to realise. And then we must hold to what we can foresee; and this is that which recurs upon the emergence of similar circumstances. But life is not exhausted by recurrence; new properties and new forms arise, which could not be foreseen, although they may finally be explained. Nay, repetition in general is only possible in the abstract. In real duration, the bite of whose tooth leaves behind its mark on everything, there is no place for repetition. Everything is entirely changed, and a concrete reality never repeats itself.

Bergson, in his criticism of the two conflicting theories, has a predecessor in the person of Kant, who, in the *Kritik der Urtheilskraft*, specified the problem in the way in which, at bottom, it presents itself in our time. He knew that, for human knowledge, there were only two ways of explaining a totality, either by understanding it as the product of previously existing parts, or as the work which realises a plan prepared in advance; but he also knew that neither of these two ways could be applicable to the totality which an organism represents. While Kant has merely concluded from this that we ought not to confound our mode of knowledge with the mode of natural action, Bergson thinks that he can give a solution of the problem. It is on this point especially that he strives to pass beyond what the criticism founded by Kant can offer.

Intelligence, knowledge, is, according to him, only a section contrived in a vaster whole. Life goes beyond

the range of intelligence. By reason of its practical point of view, intelligence has become separated from the great connexity of life; and it is to this great connexity that we should return. But how can we get there? Only by living it. We notice that around the luminous centre that intelligence can discover there is an indeterminate fringe, which is lost in shadow, and has no utility in the practical affairs of life; but it reveals other depths than those which are known to mechanism and finalism.⁸³

This vague intuition becomes clear, declares Bergson, when we consider more attentively the evolution of organic life.

In its great struggle with matter, life unfolds in several directions and expands into different types which are, as it were, the extreme points of these directions. Thus appears the opposition between the vegetable type and the animal, the one fixed in one place and deprived of consciousness, and the other mobile and endowed with consciousness. They began with common forms. In the animal world, again, there are several series of evolutions, of which the most remarkable are that which is unfolded in the type insect, and that which, through successions of vertebrate animals, reaches up to the type man. Of these two types, the one is characterised by the evolution of instinct, the other by that of intelligence. Instinct is merely a prolongation of growth, a capacity for making use of the organs (the organic instruments) in a determinate manner; intelligence is the faculty of inventing mechanical instruments. Mechanical fabrication is the essential function of intelligence. At the present time the social life is peculiarly determined by the fabrication and use of artificial instruments, by the

discoveries which, like milestones, mark the road of progress, and have determined its direction. Instinct and intelligence thus represent two divergent but equally graceful solutions of one and the same problem.

In the torpor of plant life, in the spontaneous action of instinct, and in the conscious industry of intelligence, the vital impulse has been working itself out in three different ways. Since Aristotle, the mistake has always been made of regarding these three types of life as three successive degrees of one and the same series of development. But the difference between them is not one of degree, but of nature. They are three directions taken by the same force, which has to divide itself in order to grow.⁸⁴

It is one of the marks of life that by three different ways it can attain the same result. Thus the reproduction of different types, under different conditions, is rendered possible. Sight offers a typical example, if the different forms of development of the eye in different animals be compared.⁸⁵

All this is evidence of an effort, of a desire, of an original vital impulse, of an *élan de la vie*, which makes a way for itself in the midst of the material world and which, in multiple types or in isolated individuals, stores up the results attained despite the obstacles against which it is continually hurling itself. The history of life is that of a great reserve of force, of a spring whose water seeks to percolate throughout the material mass. In itself, matter has (as the law of entropy shows) a perpetual tendency to find absolute equilibrium. Life fights against this tendency. The evolution of life does not create, in the absolute sense ; it is always conditioned by its relations to material forces and masses. But in

this circumstance, to which neither mechanism nor finalism has accorded a sufficiently important rôle, is expressed a fruitful unity, an infinite plenitude.⁸⁶

Bergson, as we have seen, takes as his basis an absolute opposition between the organic and the inorganic. Whatever great problems may arise in this connection, we may well inquire whether a philosopher is right to adopt this opposition as the starting-point of his whole conception of life. There is a fact to be considered, namely, that although science may be obliged constantly to maintain this difference between life and the inorganic, this does not introduce any difference into scientific method. The same methods are applied to animate and inanimate, and it is only through this having been done that any result has been attained. Jacques Loeb expressed a very widely spread idea when he said that difficulties of a technical order alone stood in the way of the artificial production of living matter.⁸⁷

But even if we look upon the sharp opposition of organic and inorganic as justified, Bergson's system is not better founded than those which he attacks. The relation between them and his own is that in dealing with a subject like organic life, they operate, and (this is fatal) by means of analogies. It is an analogy that mechanism employs, pending the conquest of "technical difficulties," in making a machine of the organism. It is an analogy which teleology employs when it regards the phenomena of life as responding to a desired plan. And it is still an analogy of which Bergson avails himself when he understands life as an *élan*, a thrust, an effort. He only cuts himself off from teleology (for which, nevertheless, he experiences a certain sympathy), because he draws his analogy from the

spontaneous, half-unconscious, psychical life, instead of taking it from the clearly conscious, intelligent and calculating. For him life is essentially psychological in nature. His doctrine is a sort of vitalism, built up on the supposition that there is a particular life-force struggling against the forces of matter—a supposition which is more the expression of the admiration and astonishment which the rich and forceful unfolding of life provokes, than an indication which might lead to an exact interpretation of life itself. And when he regards this vital force as kindred to the psychical life which we find within ourselves, he, like the romantic philosophy, takes things the wrong way.⁸⁸ Life is a fight against matter, a fight which, if it is victorious, leads by degrees into the world of spirit. There is poetry in this explanation, and not science, and according to Bergson, it should not be scientific. In the present case he builds upon a daring analogy just as, as we shall see, he reposes his conception of the world on analogy unconfirmed by experience.

Bergson diverges on two points from the romantic philosophy of nature given by Schelling. He preserves the mechanistic conception for inorganic nature. This is purely material; its essential law is the law of Carnot regarding the distribution of energy, and consequently it tends constantly towards equilibrium. The vital *élan* hurls itself unceasingly against this tendency. Further, he is of opinion that there is a real development in time, while the thought of evolution was, among the romanticists, purely formal or purely ideal, and only consisted, strictly speaking, in a systematic connection between the forms of nature, and was not the progressive appearance, in time, of the different forms under certain

conditions.⁸⁹ In the interval which separates Schelling from Bergson, the idea of evolution has received the realistic character which it is bound to carry in future.

In its two most characteristic series of development, the life-process has, according to Bergson, led to pure instinct on the one hand and to pure intelligence on the other. But he believes that these forms have not exhausted life. We may plunge into the profound continuity of which blind instinct and analysing intelligence are but sections. When we repel the practical motives which have produced evolution, and set to work our disinterested sense of the rich reality of life, the intuition which, for him, is the ultimate point of psychical life, and of which I have already spoken, becomes possible.

Before passing a final judgment upon Bergson's concept of intuition I shall examine two psychological questions of a more special order, those of will and laughter, which, each in its own way, will illuminate his fundamental thought.

V

THE PSYCHOLOGY OF WILL AND LAUGHTER

IT may be said that Bergson is most important in the domain of descriptive psychology. He endeavours, by means of his facility in description, to put us above the distinctions which we are forced to make for theoretical or practical reasons, above the analysis which pieces out the web of the psychical life, and to show us the individual connexity of our inner life, to lead us at last to the fountain from which, without always being aware of it, we are constantly drawing in our consideration of psychological questions. Each vessel filled at this spring contains only a little part of what flows from it ; while we are drawing, the current still goes on. It is impossible to give an idea of the stream from the content of these vessels, which, moreover, is never twice alike ; we have drawn at different moments, and at different levels. This image, though not taken directly from Bergson, expresses an essential point in his philosophy : the assertion of a profound continuity which is in no way identical with unity, in view of the continual appearance of new things in immediate connection and intimately related to all the past.

Bergson's psychological theory, as may be seen from

what I have just said, is directed against the division of psychical life into isolated, mechanically separated elements, and against the influence of habit and repetition.

He does not deny that there may be isolation and disparateness in psychical life, nor is he unaware that incrustations and stratifications are formed; but he declares that these are superficial phenomena, and that as long as life endures there is a continuous and connected inner movement.

Bergson's general ideas are characteristically put forward in two sections of his work which are essentially psychological; and so it is interesting to examine them here.

In modern psychology very different acceptations are given to the concept of will. For some it is a mystic force, like the life-force in physiology; and it would be better to exclude it from psychology. Again, for others, it designates very complex and derivative psychic phenomena—will, according to the sense which they give the word, being nothing but the faculty of drawing up plans and taking resolutions which suppose previous deliberations regarding the various alternatives offered to choice. If this sense be attached to it, it ought not to appear among the psychic elements. Following a third conception (which I myself adopt), will comprehends a whole series of phenomena, commencing with the earliest expressions of life, and, by reflex movements and instinctive acts, leading to design, planning, and resolution.⁹⁰

According to this last conception, there is in every psychic state a direct or indirect relation to action, of whatever degree or kind this relation may be; and all

sensations, representations and sentiments receive in each case the stamp of this relation ; there is then an element of will in all psychic states. The theory of will in Bergson would seem to come fairly near to this third point of view ; but with him it is somewhat obscured by the lively opposition in which he places memory, which, to his eyes, is the same as soul, to action, which brings the soul into contact with matter.

Bergson is led to the psychology of volition by the question of "free" will. He declares that every decision or resolution which can truly be called free, as against that which is due to dominant or constraining influences, or to momentary suggestions, must be inwardly continuous with the whole psychological life. However different some directions of will may be as compared with others, they are nevertheless links in one and the same evolution ; they are the stages of a history. Our experiences are generally continuous, follow on each other's heels ; and the differences which we mark between them for our own convenience are purely artificial. We should not know the history of a personality if we held to external habits or vague expressions. Superficial observation sees only a crust more or less wrinkled. But even where such a crust has been formed, it may be broken by an energetic decision of the will, in which "the basal ego finds self-expression" (*s'exprime le moi fondamental*), that basal ego which, though often lying hid, yet makes the connexity of our personality. Only that action can we call free which is the work of this ego. The whole history of the soul's former life is active in the determination of such actions ; the ego of the depths (*le moi d'en bas*) rises to the surface and asserts itself in opposition to habit and fortuitous accident.⁹¹ Sudden

and surprising as such resolutions may be, attentive observation will show us that deep down a process of fermentation has been going on, that a growing tension of the life of thought and feeling has gone before, in which apparently unmotivated actions find their explanation. My character is myself, and my actions are free when they have their roots therein. Free actions taken in this sense are rare, and liberty has many grades. Most of our daily actions are due to the suggestions of the moment or to habit; the expenditure of great energy is reserved for decisive situations, and, even when our whole personality ought to vibrate, we often remain supine and inert.

Bergson's idea of liberty applied to will agrees with the definition given by Spinoza: "We call free that which exists in virtue of the necessities of our own nature, and which is determined by ourselves alone." Liberty in this sense is not opposed to necessity.

Nevertheless, Bergson wages war both on "the errors of determinism" and on the "illusion of its adversaries." The error of the determinists consists in their contriving a mechanical and external severance between cause and effect, and making different motives appear as mutually independent and isolated elements. He is thinking here of the English "association-psychology"; but his critique does not aim at all the theories which admit the validity of the law of causation in volition. He himself accepts this law, and that precisely when he is using the concept of liberty as the expression of the inner continuity of character. He assures us that it is dangerous to define the concept of "liberty," for in so doing one cannot help becoming determinist, and he does not see that he has himself

defined it by the use which he has made of it. He finds that the "illusion" of the indeterminists consists in their supposing absolute beginnings to volitional acts, and their consequent separation of these acts from the connexity which unites them to the whole psychological life. Here, as elsewhere, he encounters his ancient enemy.

Bergson is naturally correct in his statement that human actions cannot be foreseen with the same certainty as, *e.g.*, astronomical phenomena. And equally correctly he puts this truth in relation with the other fact that repetition cannot be demonstrated to the same degree in the spiritual as in the material world. Thence comes it in great measure that we only know and understand precedent psychic states by their influence on those which follow; especially when we have to penetrate the states of mind of others do we address ourselves to their results. We are in a worse position than the novelist who can know in advance the results to which the development of the characters he creates will lead. We must ourselves live the mental condition of others if we shall know what it contains, and how is this possible when both they and we have each his own personality? And even if we succeed, we have not time to foresee, since we cannot abridge, but must hold fast to everything until the moment of decision arrives.

The interpretation of quite another psychological problem is, in Bergson's view, attached to his fundamental thought of the opposition between the real inner life and the external forms and habits which the social relations and the practical necessities of life produce. This is the problem of laughter and the comic, which form the subject of a small volume, *Le Rire: Essai sur la signification du comique* (1900).

Between us and nature, nay, between the life of our own souls and ourselves, there is as it were a veil ; because we must work for our own conservation, and must satisfy the general rules of society. It is also necessary for us to attach importance to some external properties, to the relation between things, and between things and ourselves. Language, too, augments the exteriority by creating words for each peculiarity. We do not find ourselves face to face with things and beings in their true and individual nature. We do not see the things themselves, but most frequently we content ourselves with reading the labels which they carry. And this is not the case with external objects alone ; our own psychic states also hide from us their most intimate, personal, and original qualities.

Happily art can lift this veil and show us existence in its primitive originality. For art is a work of the soul which has been able to free itself from practical necessities and from their effects. Especially do the great tragedians discover to us the ultimate profundities of the soul-life. By the aid of their own experiences they can read into the recesses of other men's souls. They do not need to have lived themselves the feelings and actions which they describe. But in themselves they have observed potentialities, which, if they were realised, would form characters such as those which they create. Thus their personages become a real part of themselves, and, as in a vision, they see reality in all its individuality. What tragic art attains positively and directly, comic art attains negatively and indirectly.

The comedian builds essentially on the observation of other men. Even were he to seek, he would find nothing laughable in himself, for we are only laughable

on that side of our personality which eludes our consciousness. And, with others, he can only exploit external conduct, the surface which is common to several individuals. If the comedian penetrated into the inner life of his model, if he attained to the inner movements which take place beneath the surface, and are continually repressed, there would be an end of the sense of comedy. The essence and significance of comedy is a reaction against all that is habitual, mechanical, impersonal, in human life. This is why it is not pure art, and has not art's disinterested character. It always contains an *arrière pensée* it wants to put right and to explain.

The comedian performs a social work. He is conditioned by social life. There is no laughter but the laughter of a group. The laughable consists in opposition to the habits and ideas of a society more or less extended. And yet it is in great measure society itself which produces the stiffness, the incrustation which is the object of laughter. Society does indeed demand that certain rules and certain external forms be observed by every one, with the result that personality becomes sluggish. But, from another standpoint, it does not like to see men becoming pure machines and creatures of habit, so that there are no more fresh problems or work in new directions. Thus it is that comedy, in the service of society, is a social instrument.

And so we see how Bergson's essential thought appears once more in his theory concerning the laughter which discovers the discord between mechanism and personality, between the shell and the centre, between the stationary and the dynamic.

There is another element in the laughable, of which Bergson speaks, but to which, in my opinion, he does

not attach sufficient importance, although it is the essential point. It is this: the laughable supposes the sudden rupture of a connection. He does not accord sufficient scope for the effect of contrast. Contrast for him is only a condition serving to arouse attention. Experience shows, however, that there must be a more or less conscious expectation, which suddenly comes to nothing. The comic is the inverse of the sublime. In the comic there is a contrast reaching downwards, in the sublime a contrast reaching upwards. In the one expectation is disintegrated, in the other we are uplifted above ourselves.

Bergson mentions only a single form of that contrast, which reaches downwards. When a man approaches us, we expect to see something living, something individual, something new; but if instead of this we find a machine, a lifeless repetition of the past, of his own past or of that of others, the fact of our deception sets us laughing.

Other special examples quoted by Bergson can be explained in the same sense. When empty ceremonies or repetitions produce the effect of laughter, it is because expectation comes to nothing. The best example of this is perhaps the comic situation produced by resemblance between two persons; Pascal had already remarked it, and Bergson rightly avails himself of it as an argument in favour of his theory. "Properly living life," he says, "ought to have no recurrences. Wherever there is repetition, complete similarity, we always suspect mechanism functioning behind the living person. Analyse your impression when confronted by two faces too much alike; you will see that you are thinking of two casts from one mould, of two impressions from the same seal, or of two representations from the

same cliché, in short of a process of industrial manufacture. This deflection of life in the mechanical direction is the true cause of laughter." But this example reaches beyond Bergson's theory; for in such cases it is not the association of ideas that is decisive. The decisive point is the passage from one face to the other; one is deceived because one expects to see another man. Pascal rightly insists on the fact that each face seen separately would not provoke laughter; it is the comparison that does this.

From other points of view it would also appear that Bergson's theory applies only to a single group of facts.

He knows only the humiliating laughter which is the expression of bitterness or mockery. The laugher, he says, asserts himself more or less proudly, and tends to consider the person of the other as a marionette of which he holds the wires. Moreover, in this presumption we are apt to mingle a little egoism, and, behind the egoism itself, something less spontaneous and more bitter.

But that is merely a special case. We do really laugh when we experience sudden comfort, when all at once we perceive that what we thought was an obstacle or an inconvenience is nothing. And we can laugh with sympathy for what we are laughing at, in sympathy with the trait or the act which provokes the laughter. We can also laugh at ourselves, and we may see, in such cases, that Bergson is not altogether right in affirming that we are only ridiculous in that which, in ourselves, escapes our attention. Bergson has spoken only of the laughter of mockery; he has neglected the laughter of humour.

And when Bergson declares that laughter is always the laughter of a group, it must be remarked that it is

not absolutely necessary that it should be a real group. Laughter may suppose an appeal to truth, to honesty and justice, even if they have to be realised in a merely ideal society, and it can be the expression, now of mockery now of humour, in a man who is alone in his time, and yet does not feel his solitude.⁹²

Bergson is, therefore, not in right in establishing a rigid opposition of tragic and comic art. Do not they both give us the reality of life? Life may be called a tragedy and a comedy, as Plato says, and sometimes it is both at once. And if art is to uncover reality, which is always individual, it must take reality both in its limitation and in its extension, in its outwardness and its inwardness. All individual existence comprehends both of these; we need, then, a double art to raise the veil which hides it from us.

When, further, Bergson teaches that "art has no other object than the removal of practically useful symbols, the generalities conventionally and socially accepted, in a word, all that conceals reality from us, and to put us face to face with reality itself," the sense which he gives to art recalls the sense which he gives to philosophy, as against the analysis and abstraction of science, and we are led to ask ourselves what are the relations between art and philosophy. In this way we come back once more to the concept of intuition.

VI

METAPHYSIC

THE division of labour is operative everywhere, even in philosophy. The various problems diverge more and more, and perhaps, some day, they will only have a general type in common, a type whose origin will itself be a new problem. Psychology, epistemology, and ethics, each has its separate starting-point; and the question arises whether the series of thoughts thus originated can be in harmony when they meet. For Bergson, none of the problems belonging to the different branches of philosophy just mentioned is the central one; on the contrary, it is a problem that has been put in the background by the philosophers of the critical and positivist schools, not because it ought to disappear, but because it is bound up with a peculiar difficulty, and because the study of it supposes that one has, by way of preparation, examined these different parts of philosophy. It is the problem of existence, the cosmological or metaphysical problem. Bergson attacks it boldly. Like Faust, he is dissatisfied with his knowledge so long as he has not solved the world-riddle. Like him, he hopes "to discover and understand the force which acts at the heart of the world, the ultimate solution of all enigmas." In order to attain this end, Faust

abandoned himself to magic ; Bergson invokes intuition. With its help, too, he seeks to overcome the opposition between life, particularly personal life, and mechanism, that opposition which is his basic thought. Intuition elevates us above this opposition.

In a speech at the philosophical congress of Bologna, in 1911, Bergson said : “ A philosopher worthy of the name has never said more than one thing : and he has rather sought how to say it than actually said it. And he has only said one thing because he has only seen one point : and this was less vision than contact.” ⁹³ In this, Bergson certainly expresses what his own experience as a thinker has taught him. All that he has written turns, as we have seen, around one essential thought, and the solution of the problem which it contains. And we learn from the expressions of his style and by his images, by his continual return to the same point, by his struggle against language and concept, that it has cost him a great effort to preserve and express what is for him the centre of the world and of thought. The vast influence that he has exercised comes to him, at its best, from this part of his philosophy. Let us hope that it will be more effective than the consequences which some readers have drawn from his ideas : that, as scientific labour does not lead to the summit of knowledge, we must leave science and give ourselves up to dreamy contemplation. Bergson, in order to represent his fundamental thought, and to attain independence with respect to all systems, has himself needed to work obstinately ; to arrive at his goal, he has had to treat a series of more special questions, on which he has thrown a brilliant light. His work, especially his descriptive psychology, has been excellent. But psychology is for him only the

foundation which serves as the basis of metaphysical intuition.

Intuition is, then, a contemplation, or, as Bergson calls it, a view, a contact. It is at first only an image of our own inner life that it brings us. How, then, can we extract from it a doctrine, a theory? Intuition reveals to us only one aspect or one part of existence. How, by its aid, are we to come by a conception that shall embrace existence as a whole?

Bergson does not set this question frankly; and yet the very possibility of metaphysic is at stake. But it is clear that he does not, like Hegel, take the road of dialectic deduction or that of construction. What other road is there then leading from part to whole? There remains only that indicated by Leibnitz when he declared that all metaphysic was founded on analogy. Kant, with his more critical procedure, has had to take it, and so has Bergson, as I have shown in *Den menneskelige Tanke* (French ed. pp. 318-327).

Bergson wrongly reproaches philosophical systems for deciding from the first that one part of existence represents the whole. It is fatal to any system, to any metaphysic, and he himself has been unable to escape what he regards as a vice of thought. His intuition shows us our inner life as a perpetual unfolding, a tendency, a new creation. What we thus discover in the most intimate depths of reality becomes a type, a model according to which we represent all other reality when we rise superior to the practical, necessary, but external, way of looking at things. All other true reality can differ only in degree from that which intuition shows us in ourselves. There is, at the root of everything, an aspiration, a desire, an *élan*. The centre is not a

lifeless existence, but a becoming, an unfolding, a tendency. In *L'Évolution créatrice*, Bergson wished to show, to use his own words, that "the whole is of the same nature as the self, and that it is to be seized by a more and more complete absorption in oneself." ⁹⁴

Bergson's method is not solely intuitive; intuition is only the first step, the rest being left to analogy. Analogies can be very fruitful for science: they can lead to discoveries and to new points of view; but they prove nothing, ⁹⁵ especially not when they do not help to illuminate investigations by the help of investigations in another sphere, but when they have to explain existence as a whole, and no confirmation of experience, no verification, can assure their value. In fact, all metaphysical ideas are founded on analogies more or less daring; but then these conceptions are on the borders of the world of thought and of that of poetry.

Let us examine more closely how Bergson applies his intuitions and his analogies. In his conception of nature, he puts life, as we have seen, in a complete opposition to the inanimate. He insists on the historical character of life. The new is always bound up with the old, but can, nevertheless, appear in an unexpected opposition, so that predictions are impossible. Physical and chemical laws are only conditions and limits of life; they are not its cause. And when natural science avails itself more and more of purely mathematical procedure, while, from another aspect, life, when we penetrate it, presents an analogy, which is perhaps more than an analogy, with our psychical life, mathematics and psychology find themselves struggling against each other to give an explanation of the world. Mathematics rests on the hypothesis that the same elements and the

same relations recur ; psychology, on the contrary, shows us an accretion, an evolution, which may rightly be called a new creation. For Bergson, "the idea of creation merges into that of growth." We know this growth or creation directly by our psychical life, but it is the peculiar mark of all that lives in its continual struggle against the tendency of matter to finish in absolute equilibrium. "If," says Bergson, "I consider the world in which we live, I find that the automatic and rigorously determined evolution of the connected whole is action thrown off, and that the unforeseen forms that intersect life, forms capable of being themselves prolonged into unforeseen movements, represent action in process of being performed. Now I have every reason to believe that other worlds are analogous to ours, that things happen in the same way there. And I know that they are not all constituted at the same time, for even now observation shows me that there are nebulous masses in process of concentration. If throughout the same sort of action is coming to pass, whether being exhausted or trying to repeat itself, I simply express this probable similarity when I speak of a centre from which worlds are being thrown off like rockets from an immense bouquet—provided, of course, that I do not set up this centre as a *thing*, but as a continuity in the act of throwing off. God, thus defined, has nothing absolutely finished in his essence. He is incessant life, action, liberty. Creation, thus conceived, is not mysterious ; we test it within ourselves as soon as we act freely." "We must try here to see for the sake of seeing, no longer for the sake of acting. Then the absolute is revealed very near to us, and, in a certain measure, in us. Its essence is psychological, not mathematical

or logical. It lives with us. Like us, but, in certain aspects, infinitely more concentrated and collected upon itself, it endures." ⁹⁶

From what is seized in intuition, Bergson descends, as we have seen, by way of analogy, to material nature whose action is a tendency to equilibrium, and from thence he reascends to the centre of the world as the expression of the most concentrated life. Physics, biology, psychology, and theology unite to give a basis to this large intuition. It is the supreme point of Bergson's philosophy.

I must go back to look for the base from which Bergson sets out towards this conclusion. We find to begin with the reproach which he addresses to all science and all philosophy, modern as well as ancient; he accuses them of thinking that one can explain movement by rest, change by the immutable, the living by the inanimate. In his opinion this idea has produced an intellectual habit from which we can only free ourselves by an act of will, by a leap into an immediate view which allows us to perceive the pulsations of the life which beats, not only in us, but in all existence. Bergson thinks that Zeno's conception, which understood movement as the resultant of motionless states, is classical, and that it is typical of science in that science must always understand time as the sum of indivisible instants, just as it understands nature as likewise a sum of indivisible atoms.

Yet this judgment seems to me to be wrong. The ancient conception certainly had a tendency to put the invariable above the variable, and to think that one could not found a science of the mutable. But modern thought and science, with Giordano Bruno and Galileo,

have established in the world of change itself, and have given themselves the task of discovering the laws of movement and of evolution. Even rest has been taken as minimal or potential movement. All the laws of nature that contemporary science has discovered are laws of movement, and the great part played by the concept of evolution proves a tendency quite other than the ancient doctrine of immutability. The elements or fixed forms before which we stop in the early stages are only stations, resting-places, not everlasting destinations. Neither multiplicity nor unity, neither discontinuity nor continuity can express the action of thought and the nature of existence; they are only abstractions. The real work of thought, like all that we can imagine of the nature of existence, reveals a continual struggle between continuity and discontinuity, a perpetual oscillation from one to the other, without either being able to be derived from the other.

Bergson thinks that he sees why intelligence accords importance to invariable elements: it is because it is in the service of the practical life. He is, in the way in which he understands human knowledge, candidly pragmatist.⁹⁷ But he breaks with pragmatism and with scientific attitudes when he passes to his own philosophy, demanding intuition, and placing immediate perception above everything. For him, the problem of philosophy is to lead up to intuition, rising above the interrupted and disparate.

But how does this become possible when, as Bergson so often repeats,⁹⁸ we can indeed pass from intuition to intelligence and analysis, but not from analysis to intuition, as we can pass from movement to rest, but not from rest to movement? We must be able to

follow these two roads, to render intuition more precise by analysis, and, by a fresh intuition, to reassemble what analysis has separated. As we have seen already, what we have called respectively concrete, analytical, and synthetic intuition are continually reacting upon each other. Bergson finishes in a dualism between intuition and analysis which can only be surmounted by a concentrated act of will, to which he appeals, and which he tries to provoke by the art he expends in describing it.

When we attain such an intuition, says Bergson, everything for us becomes life and movement, all that is lifeless and immutable disappears; we feel ourselves attracted, uplifted, carried along. "We are more *alive*, and this increase of vitality brings with it the conviction that the most difficult philosophical problems can be answered, or even, perhaps that they ought not to arise, being the result of a stiffened view of the universe." ⁹⁹

With the awakening of intuition, however, a new problem immediately arises: What is the relation of this problemless state to the state which is replete with them? Why is there a difference between intuition and intelligence, between conviction and proof? In the state of intuition we forget that there exists psychical states of quite another kind; but they reappear afresh, and they are not to be explained by the intimation which regards them as enemies and nothing else.

The difference between the two states, that in which problems arise and that in which they make way for an immediate or renewed intuition, discloses a primitive unity, when we reflect that the nature of the human mind appears equally in both. Bergson and pragmatism are wrong when they declare that they do not find the essence of personality in scientific investigations as well

as in immediate intuition. Even the methods which science creates and the practical ways which life obliges us to take are conditioned by the nature of the human spirit, and would be incomprehensible without it. This fact shows itself in a purely biological manner in the close relation between organ and function. We are so constituted, both psychologically and epistemologically, that we can only know about the organ by way of the function. It is only through study of the manner in which investigation and action operate that we become acquainted with the nature of spirit. We deprive ourselves of this knowledge when, in advance, we put ourselves outside the life of action and the research which also is a part of life.¹⁰⁰

And in what language can the content of intuition be expressed when intuition is absolutely opposed to intelligence, and "only the understanding has a language" ?¹⁰¹ Intelligence cannot help us because it has become the slave of the practical life. As we saw in the beginning, Bergson has very clear ideas on this point, and he tries by the aid of comparisons, each of which is one-sided, but all tending in the same direction, to provoke an effort of will, a concentration which is necessary in order to enter into intuition. He can give a brilliant description of these proceedings of the mind ; but he is also right in saying that all spiritual action of any depth, in the intellectual sphere or elsewhere, always comes about, properly speaking, by an awakening of personal activity. And in science it can also be of importance to have a total image, a collective perception of a connexity. Here imagination offers its services to science. But the scientific imagination is distinguished from the artistic by the fact that it is not an absolute

conclusion, but serves always as the base for the introduction of new reflections, while artistic imagination has its value and its end in itself. This is why Bergson's intuition belongs to art and not to science. He finds an analogy between art and philosophical intuition, and he frequently reverts to it.¹⁰² But it is more than an analogy when intuition appears in violent opposition to reflection, as Bergson represents it. And in any case there is no solution of problems; on the contrary, it happens, as we have already pointed out, that when we pass to intuition we pass into a state without problems.

It is finally the opposition between science and art that characterises the philosophy of Bergson. It is the same opposition that exists between Sunday and weekday, between poetry and prose. Such, however, is life: it moves among oppositions, and a courageous thought keeps all these oppositions in view precisely because they belong to life. In prosy moments, we have to find the hidden thread of poetry, and in poetical moments we must not forget that at a given instant we shall return to the prose of life. There is a poetry in thought-activity which pragmatism is apt to deny, and which most frequently acts as a power of inner animation. In the heights alone does it take wing and seek for expression. But this poetry is only revealed to a working mind.

The points at which intuition plays a part in his philosophy bring Bergson not only upon the frontiers of thought and poetry, but also upon those of philosophy and theology. As we have seen already, the concept of God is, for him, at the same time the source or centre whence proceeds the evolution of the world. In all fields, in all cosmic systems, though more directly in

the evolution of life, there is such an origin of activity and of life. The opposition which otherwise plays such a great part in his philosophy, between life and matter, is relegated to the background. This opposition belongs to a problem which, for "the supreme intuition," is unjustified and unfounded.

A philosopher should always be careful not to employ theological expressions. Theological dogmas are problems of philosophy, and it suffices to think on the concept of God (which is not done in the moment of intuition) in order to see that it contains the greatest problem of all, namely, whether the ultimate foundation of value and good can be identified with the ultimate foundation of the reality which experience displays to us. We have no right to put this great problem away. And it is rendered more pressing because the series of values (the series of means and ends) and the connexity of reality (the series of causes and effects) are each respectively infinite. It is always possible to imagine higher values, profounder causes, and more distant future effects. Face to face with the problems which are always resetting themselves for us, an intuition can only signify a preliminary position. It is only by an act of faith, a faith the psychological nature and the conditions of which it belongs to philosophy to examine, that a harmony is supposed between the series of value and of cause.¹⁰³

It has been Bergson's desire, in the highest flight of intuition, to unite physics, biology, psychology, and theology. He believes that he has the right to make use of the word creation for the continual addition of new phenomena in different fields. But for him creation means the same thing as growth, and he represents the

evolution of the world as analogous to the source of a river. Now the source is indeed the river, the first part of the river to flow !

In reply to a criticism expressed in a periodical published by the Jesuits, Bergson nevertheless affirmed that his philosophy leads "to the idea of a creative and free God" (*l'idée d'un Dieu créateur et libre*). To this it was rightly answered that, for Catholic theology, God is not merely the source from which the river springs ; God does not develop himself to a world but causes it to appear by means of a creation of a kind quite different from what Bergson means by the word.¹⁰¹

Philosophy in truth does better and renders the best of services to the spiritual life when it follows its own path and treats religious problems in its own way. In this manner one can settle the account and see how far, in the borderland, strictly human roads can take us. A work of this nature should always be taken up afresh. We could not conclude such an examination of thought, so many new phenomena, new problems, and new situations does experience bring us. There is from time to time an achievement, a moment of rest, when we take our bearings before setting to work again. But this achievement is not a conclusion. There will always remain something outside our closed circle. Goethe's saying applies here : "Nie geschlossen, oft geründet."

Bergson's "intuition" is distinguished from former attempts made in the same direction by the fact that it is an intuition of movement, of change, of life, of evolution. And he even constantly insists on the fact that an isolated individual cannot lead us to the intuitions by the aid of which thought attains its conclusions ;

it requires the work of thinkers from many different sides. And the intuitions that have the greatest value are those that have passed through the purgatory of understanding, though a leap is necessary to come from thence to intuition.

A philosopher of any importance is always at the same time a symptom of the tendencies of an epoch, and one of the factors which determine these tendencies. By reason of the artistic elements which it contains, the philosophy of Bergson is perhaps most interesting in that it is a conscious expression of a current, which, in our time, comes of dissatisfaction with rational thinking and experimentalism. Having the rare faculty of rendering spiritual matters in an artistic fashion, having meditated and worked tirelessly, he has translated this tendency into terms of principle. Even those who are of opinion that, in his philosophy, thought has not received its due meed of place and recognition, cannot but admire the power with which he has represented to the eyes of his contemporaries the eternal battle of life and of science. Whatever the conclusion at which Bergson arrives, whatever the issue of the conflict between admiration and reprobation which his works excite, they have, we must admit, awakened a new interest in the great questions with which philosophy has for all time been occupied.

I have naturally judged Bergson's philosophy from my own point of view; however, I have tried to give an objective presentation of his system, and to let criticism arise out of the characterisation I have given.

NOTES

¹ (P. 13.) This fear of materialism may entail doubtful consequences, for Wundt, in order to safeguard the independence of psychology, quite naturally seeks to limit the "Elements" as little as possible; for a psychological correlate is necessary only to the elements and not to their connection. So here he is suspicious of my calling the new attribute of a recognised experience a quality (*Die Bekanntheitsqualität*). He thinks that, in this, I was moved to replace a psychological explanation by a physiological. He finds in it a sign of the times: "He is by no means to be reckoned among the principal representatives of the materialistic psychology. But this is just what seems to me to be eloquent of the luxuriance of hypothetical and psychologically fruitless attempts at physiological explanation in present-day literature, from which . . . even so impartial a psychologist as Höfding cannot keep himself free" (*Phil. Stud.* x. p. 61). To this I may reply that we must, in my view, ask, with regard to all psychical processes, whether it is possible to discover a physiological explanation. This holds for connection and comparison, as well as for particular elements and qualities. By the identity hypothesis, which Wundt is himself prepared to support, a physiological explanation does not exclude the psychological. Every phenomenon is, so far as possible, to be investigated from both points of view. Psychologically, I take immediate recognition, on the analogy of the association of similars and comparison, as a limiting case of this act, namely, as the most elementary form under which the relation of similarity can make itself felt in consciousness. The psychological explanation given by Wundt obliterates the distinction between the more elementary and the more composite psychical processes, for he assumes that free ideas are concerned in the simplest cases of recognition. . . . Wundt takes up an attitude similar to this in respect of immediate recognition in his discussion of Weber's law. He distinguishes between experiences proper and their "comparison" (*Phys. Psych.*, 5th ed., i. p. 541). It is very questionable whether this distinction holds good in respect of the most elementary empirical processes. Among the literature on Wundt, I refer particularly to Edmund König,

W. Wundt, *seine Philosophie und Psychologie* (Stuttgart, 1901); Frohmann's *Klassiker der Philosophie*; Allan Vannerus, *Vid Studiet af Wundt's Psykologi* (Stockholm, 1896). Very useful was the unpublished dissertation on Wundt as a Psychologist of my young friend, Aug. Bjarnason, M.A.

² (P. 13.) Cf. e.g. Wundt, *System der Philosophie*, 1st ed., p. 533: "The increase of intellectual energy, consisting only in the qualitative perfecting of organic production, the quantitative mensuration of physico-chemical energy remains completely untouched thereby. Thus the quantity of natural power is as little increased by any progress in organic development as is the quantity of matter. But the natural powers and their substrate have immeasurably increased in value by the development of organic life. Yet, by the rise of purposive voluntary action, and of the ideas and feelings that accompany it, alone is valuation possible, though at the same time it is necessary" (cf. also *Phys. Psych.* iii. p. 781).

³ (P. 14.) The actual view of the soul was urged more especially by Fichte, though already included in Kant's conception of consciousness as synthesis. In Denmark it has been supported by F. C. Sibbern and myself (*vide* especially my essay, "On Recognition, Association, and Psychological Activity," *Vierteljahrsschr. für wiss. Phil.* xiv. pp. 311-315).

⁴ (P. 17.) Wundt thinks that I have, in my essay cited above (n. 3), misunderstood his statements on apperception in the third edition of *Phys. Psych.*, by drawing the conclusion that he does not treat association and apperception as distinct processes, after he has rested the distinction between them on an abstraction; this implies only "that they always accompany each other in point of fact" (*Phil. Stud.* vii. p. 229 f.). But in the later edition (4th) of *Phys. Psych.* (ii. p. 447) he says, speaking of the simplest connection of ideas, "These processes are distinguished by the complete lack of influence exerted by the will on the manner of their entry into the most determinate of the apperceptive connections of ideas which we are about to discuss." And, further (p. 479), "Association brings ideas only into those connections in which it can, of its own constitution, regulate itself." Now Wundt continues to accept, in addition to this (in the 5th ed. of his psychological work), a determinate centre of apperception in the brain; and this would seem to imply that apperception and attention need not always present themselves in company. According to Wundt, we are immediately conscious of the activity expressed in apperception "by way of a feeling of activity" which is common to all apperception (*Phys. Psych.*, 4th ed., ii. pp. 266, 270, 279). In other places (e.g. *Phil. Stud.* x. p. 109) he describes apperception, or activity of the will in general, as the object of immediate contemplation (*Phys. Psych.*, 4th ed., ii. p. 560: "The concept of activity proceeds, in the first place, only from our

own acts of will, and only thence is it transferred to objects externally moved"). In his earlier works, Wundt closely connects the consciousness of activity with the immediate experience of innervation, which later he rejected. On the difficulties bound up with every sort of consciousness of activity Wundt expresses himself with no uncertain voice. Cf. on this question, my *Psychology*, vii. B. 4, and my essay on "Recognition," *Vierteljahrschr. für wiss. Phil.* xiv. pp. 292-310.

⁵ (P. 18.) Cf. Wundt's essay, "Über die Definition der Psychologie" (*Phil. Stud.* xii. p. 517); Friedrich Paulsen, *Einleitung in die Philosophie* (Berlin, 1892, pp. 116-132). ("Intellectualistische und voluntaristische Psychologie.")

⁶ (P. 19.) In my treatment of psychology I endeavoured, even in the first edition (1882), to prove a psychical activity in sense-perception, the association of ideas, in appetition and aversion, as well as what, in particular, is called will. In will I found the most characteristic and intimate nature of psychical life (iv. 7e). If now I could recast it thoroughly I should make it a psychology of will, with respect also to its form.

⁷ (P. 26.) Some characteristic passages of Wundt on the subject of metaphysic are to be found in *Phil. Stud.* xiii. pp. 80, 428; *Einleitung in die Philosophie*, pp. 348-352.

⁸ (P. 28.) Wundt's development of this point is in his *System der Philosophie*, iv. 1. 3 (1st ed., pp. 361-367). His line of thought seems to me to be quite clear. I have presented it as I explain it.

⁹ (P. 31.) Cf. on this question my *Psych.* iii. 10-11; *Phil. of Religion*, ii. 6; *Problems of Philosophy*, iii. 4. In his excellent treatment of Fechner, Wundt rightly asserts that he builds on analogy, rather than on the scientific method which induction demands. Analogy and induction are, for Wundt, so related, that the former limits itself to a small number of attributes, while the latter requires as many as possible (*Gustave Theodor Fechner: Rede zur Feier seines hundertjährigen Geburtstage*, Leipzig, 1901, pp. 70-73). But the most important of all items in an analogy is the starting-point (which Wundt calls the Angriffspunkt), or point of similarity. Analogy is a relative similarity, and its decisive factor is the degree to which this relative similarity may be treated as the sign of a more profound identity. In metaphysic and religion, existence at large is illustrated by the idea of one of its particular parts (or aspects), and here the analogy must always remain imperfect.

¹⁰ (P. 32.) Cf. my *Phil. of Religion*, §§ 80-91, 129.

¹¹ (P. 34.) By "Heterogony of the End" Wundt understands what I call the "Shifting of Values." See my *Ethik*, xii. 4. He seems to assume that the shifting of motives (the subjective shifting of values) always presupposes that more is included in the effect than in the purpose. This, however, is not always necessary, for the rise of

new motives may be rendered possible partly by becoming used to the results of actions, partly by the entry of other new conditions. We have a purely psychological treatment of the shifting of motives from Spinoza, Hartley, and James Mill. In the history of philosophy Hegel lays great stress on the "Metamorphosis of Ends."

¹² (P. 35.) Cf. my critical remarks on Wundt's "Ethics" in *The Monist*, July 1891, p. 532 (where I showed that Wundt, in his opposition to eudaemonism, forgets his own doctrine of the "Metamorphosis of Ends"), and in my *Ethik*, viii. 4; xii. 4.

¹³ (P. 40.) For the history of Italian Philosophy before Ardigò, I refer to Louis Ferri, *Histoire de la philosophie en Italie au 19^e siècle* (Paris, 1869); Alfred Espinas, *La Philosophie expérimentale en Italie* (Paris, 1880). In Ueberweg's handbook there is a sketch by Luigi Credaro. Regarding the condemnation of the Critical philosophy, cf. Rudolph Eucken, *Thomas von Aquino und Kant, ein Kampf zweier Welten* (Berlin, 1901). See also Giovanni Marchesini, *La Vita e il pensiero di Roberto Ardigò* (Milano, 1907).

¹⁴ (P. 46.) The last remarks on Equivalence are in *L' Unità della coscienza*, pp. 410-413. This was much later published as the essay *La Formazione naturale*. They do not seem to me to be quite sufficient, for if it be admitted that external conditions must enter besides the inner dispositions, so that a *distinzione* enters, the special forms have their equivalents, not only in the *indistinto*, but also in its dispositions, the external conditions. This is really latent in Ardigò's doctrine that every *indistinto* is circumscribed, and that the distinction between *distinto* and *indistinto* is relative.

¹⁵ (P. 47.) "Quando il pensiero perdì di vista l' infinito, fissandosi nel distinto finito, esso infinito lo assiste inosservato, e costuisce la stessa forza della logica del suo discorso." From *Nat.* p. 136 (*Opere filos.* ii.).

¹⁶ (P. 48.) Ardigò is convinced that validity does not spring from the similarity of thought to the object, but from the inner nature of thought itself (*La Psicologia come scienza positiva*, p. 228; *Opere filos.* i.). But this is no explanation of validity. In another place (vide *L' Unità della coscienza*, p. 441; *Opere filos.* vii.) he calls truth a quality of thought ("una qualità del pensiero"). But if thought is a phenomenon with other phenomena, what has this quality of thought to do with them? A certain dogmatism on Ardigò's part comes out here.

¹⁷ (P. 49.) In a later edition of the *Psicologia* (1882), Ardigò adds the following note to his passage on "psychophysical reality": "Questa espressione, sostanza psicofisica, non è altro che l' Indistinto naturale precedente e sottostante ai due fenomeni distinti del mondo della psiche o di quella della materia" (p. 387). The concept of the *indistinto* was first introduced by the essay *La Formazione naturale* (1877).

¹⁸ (P. 54.) Ardigò directs this especially against Mamiani. See the essay *La Religione di T. Mamiani* in *Opere filos.* ii.

¹⁹ (P. 56.) Not long ago William James proclaimed his connection with the older English school, and explained that he built on the same foundation (*vide* iv. 1). This connection, however, is apparent only in certain general principles, which are now recognised by most philosophers. Besides, James introduces them with modifications, which cannot be derived from the principles of the older English school.

²⁰ (P. 60.) In addition to the books mentioned Bradley has published a succession of essays in *Mind*. I make use of some of these for my treatment.

²¹ (P. 69.) Bradley finds himself in decided opposition to voluntarism. It follows from his whole standpoint that he can find no solution of his riddle in an appeal to the will. "What we know as will presupposes a relation and a process. This is true of energy or activity, or of all such things" (*Appearance and Reality*, p. 483). Bradley proceeds from the fact that the concept on which we found our philosophy must be complete, and must not lead to fresh questions. He, like Goethe, makes the *Urphänomen* a something which needs no explanation (cf. my *Problems of Philosophy*, English ed., with a preface by Wm. James, New York, 1905, pp. 124, 196). That the will is a concept raising new questions is undoubtedly a correct view of Bradley's. Schopenhauer, the nineteenth-century father of voluntarism, has overlooked this. But is this not true of all the concepts which we try to bring forward as conclusive? And above all of the concept of experience which Bradley proposes to make his basis? I abstract here from the purely psychological aspect of the matter. Bradley has not yet laid bare his psychology. One may see, however, from his essays in *Mind* ("On Active Attention," 1902; "The Definition of Will," 1902-1903) that his psychology is preponderantly intellectualistic. As against James Ward, who criticises Bradley from the standpoint of voluntarism, A. E. Taylor, a thinker not far removed from Bradley, remarks that we must be clear that activity can be no expression for the Highest or the Absolute, for activity presupposes an opposition (*Mind*, 1900, p. 258. Cf. my *Philosophy of Religion*, §§ 18, 22). This objection admits of no other evasion than that so often seized by philosophic theists; to take the Deity as restricted, as e.g. Rashdall in "Personality, Human and Divine" (in *Personal Idealism*). The problem of Evil has especially led many thinkers to this result. It is perfectly clear how the problems crop up again. The "Absolute" is, for Rashdall, not God, but "a society, compounded of God and all spirits." Frankly, I do not see the use of dragging the question into the field of mythology.

²² (P. 76.) Individual traits of my sketch of Taine I owe to Boutmy (*Taine, Renan, Schérier*, Paris, 1900), and to Albert Sorels, *Thoughts on*

Taine, his speech on the occasion of his admission to the Académie Française (1895).

²³ (P. 82.) Charles Renouvier, *Esquisse d'une classification des doctrines philosophiques* (Paris, 1886), ii. p. 395. Cf. on Renan, G. Séailles, *Ernest Renan: essai de biographie psychologique* (Paris, 1894); Mme. Darmstetter, *La Vie d'Ernest Renan* (Paris, 1898); Ed. Platzhoff, *Ernest Renan, ein Lebensbild* (Leipzig, 1900).

²⁴ (P. 84.) Cf. my essay on "Recognition, Association, and Psychical Activity" (*Vierteljahrsschr. für wiss. Phil.* xiv. p. 307 f.; *Psychology*, vii. B. 4).

²⁵ (P. 89.) [Renouvier died 1903. Mention should be made of Gabriel Séailles, *La Philosophie de Charles Renouvier, introduction à l'étude du néo-criticisme* (Paris, 1905).]

²⁶ (P. 90.) [In the last year of his life (1903) appeared *Le Personalisme*.]

²⁷ (P. 92.) Renouvier got this thought from his friend Jules Lequier (who died young). He frequently refers to him. In the essay, "Doute ou croyance" (*L'Année philosophique*, 1896, pp. 44-51), he spoke of him at length. The whole treatment recalls Fichte's philosophy. The conflict between Dogmatism and Idealism is, according to Fichte, decided by a choice, and the choice depends on the sort of man one is. See on this choice especially Fichte's *Die Bestimmung des Menschen* (Berlin, 1800), pp. 186, 193.

²⁸ (P. 95.) *Le Personalisme* gives a new treatment.

²⁹ (P. 99.) For a closer view of this see my *Psychologie*, v.d., and my *Problems of Philosophy*, pp. 130-138. On Renouvier's last days see L. Prat, *Les Derniers Entretiens (de Ch. Renouvier)*, Paris, 1904.

³⁰ (P. 110.) See the preface to Maxwell's essay on Faraday's *Lines of Force*. The thought that the application of the doctrine of number to natural phenomena depends on analogy was later put forward by Helmholtz in his essay in the *Festschrift an Zeller* (1887), *Zählen und Messen, erkenntnistheoretisch betrachtet*, and by Ernst Mach in his *Die Prinzipien der Wärmelehre, historisch-kritisch erläutert* (1896). How much Maxwell was occupied with the idea of analogy may be seen from the fact that, at the time when he was writing on Faraday's theory of force, he raised an objection in a discussion of the question as to whether there are real analogies in nature. (Printed in Campbell and Garnett, *The Life of James Clerk Maxwell*, London, 1882, pp. 235-244.) The final result of this does not seem quite clear to me. Really it is only a sketch, hinting at various analogies that might be held significant for knowledge. A witness of the influence of the Critical philosophy on Maxwell's thought is a remark of the analogy between ground and cause: "Reasons, when spoken of with relation to objects, get the name of causes, which are reasons, analogically referred to objects instead of thoughts" (238).

³¹ (P. 111.) Cournot (*De l'enchaînement des idées fondamentales*, 1861) has developed similar thoughts.

³² (P. 113.) At a meeting of the University College Christian Association in May 1903, Lord Kelvin said that we cannot say that science neither maintains nor opposes a creative power with respect to the origin of life. Nay, science positively upholds a creative and combining power, for life is not to be explained purely physically. This statement evoked a lively discussion, in which Thiselton-Dyer, Karl Pearson, Ray Lancaster, and others, strongly opposed Kelvin's assertion (*Times*, Weekly Edition, May 8, 15, and 22). Only the great authority of the famous physicist could have caused such a commotion about this uncritical utterance.

³³ (P. 117.) On Kirchoff's treatment see Boltzmann (*Gustav Robert Kirchoff, Festsede*, 1888, p. 25). "The aim is not to produce bold hypothesis as to the essence of matter, or to explain the movements of body from that of molecules, but to present equations, which, free from hypothesis, are as far as possible true and quantitatively correct correspondents of the phenomenal world, careless of the essence of things and forces. In his book on Mechanics, Kirchoff will ban all metaphysical concepts, such as Force, the cause of a motion; he seeks only the equations which correspond so far as possible to observed motions." [It should be mentioned that Mach has written *Erkenntnis und Irrtum* (Leipzig, 1905).]

³⁴ (P. 124.) Cf. *Problems of Philosophy*, pp. 100-105.

³⁵ (P. 125.) At the Philosophical Congress at Paris in 1900, there was a discussion on a paper approximating to the standpoint of Mach and Kirchoff. It was stated that if science reads acceleration instead of force, it must read muscular symbols as visual; the reason being that these are capable of delicate measurement.

³⁶ (P. 125.) Cf. on this dynamic-symbolic concept of truth, *Problems of Philosophy*, pp. 81-85.

³⁷ (P. 135.) Cf. *Problems of Phil.* pp. 32-36. Fr. Carstanjen, a follower of Avenarius, gave a résumé of the first volume of the *Kritik der reinen Erfahrung* in his *Richard Avenarius' biomechanische Grundlegung der neuen allgemeinen Erkenntnistheorie* (Munich, 1894). In many points the treatment of the main work becomes clearer through Carstanjen's interpretation. But he gets clarity only by taking psychological examples from the second volume of the work, and he ought not really to have used these at all, for the "independent" series must explain the "dependent," and not *vice versa*. Besides, Carstanjen adds several "Symptome," which I have used in the text. The verbal utterance of Avenarius in the text is to be found in "Richard Avenarius, ein Nachruf von Fr. Carstanjen" (*Vierteljahrsschr. für wiss. Phil.* xx.). Wundt is wrong in his otherwise excellent critique of Avenarius ("Über naiven und kritischen Realismus," *Phil. Stud.* xiii. p. 331) in calling his doctrine a materialism.

³⁸ (P. 140.) Cf. my *Phil. of Religion*, end of § 88.

³⁹ (P. 140.) While Avenarius has given a natural history of the problem, I set myself the task, in my *Problems of Phil.*, of finding the characteristic element of the content of the main problems. My inquiry confirmed Avenarius, in so far as it showed that the relation between discontinuity and continuity comes out in everything that is called a problem. A more essential difference is that I emphasise the inexhaustibility of experience (of existence), while Avenarius works with the idea of an ultimate state. So that I lay greater stress on the abiding irrationality of our relation to existence.

⁴⁰ (P. 151.) Guyau's theory is criticised from a standpoint similar to this in Ch. Christophle's acute essay, "Le Principe de la vie comme motive morale selon J. M. Guyau, étude critique" (1901). (From the *Revue de métaphysique et de morale.*)

⁴¹ (P. 157.) Cf. my *Phil. of Relig.* § 31. Fouillée (*Le Mouvement idéaliste*, p. xxii.) calls Guyau's "Irreligion" a religion of the future, although Guyau himself would not have called it so. F. Buisson ("L'Éducation morale et l'éducation religieuse," in the collection *Questions de morale*, Paris, 1900, p. 329) is of opinion that it deserves the name religion in the highest degree. Naturally, the name is no great matter. A good sketch of Guyau and a review of his ideas were given by his step-father, Fouillée, in *La Morale, l'art, et la religion d'après Guyau* (Paris, 1889). Josiah Royce, the American philosopher of religion, gave a very sympathetic sketch of Guyau in a chapter of his *Studies in Good and Evil* (New York, 1898), pp. 379-384.

⁴² (P. 163.) In his book, *Richard Wagner, poète et penseur* (3rd ed., pp. 429-432), Henri Lichtenberger has tried to show that Nietzsche is unjust to Wagner in accusing him of "conversion." He finds—in spite of various minor differences—a continuity in Wagner's view of life. That he later placed Christianity higher than Buddhism, though he had formerly held it to be of equal sublimity, means really only that he—as, in his way, Nietzsche—was reacting against Pessimism. He was never "confessional" in his religion.

⁴³ (P. 163.) Nietzsche's sister, Frau Elizabeth Förster-Nietzsche, has begun a biography, of which two volumes have appeared (*Das Leben Friedrich Nietzsches*, i. and ii., Leipzig, 1895-1897). This goes as far as 1890. In addition we have Nietzsche's letters (2 vols., 1900-1902). [The last volume of the Biography, ii. 2, and the third volume of letters have now been published.] Many passages of Crusius's *Biography of Erwin Rhode* give us explanations of Nietzsche, and render him more comprehensible; so with Paul Deussen's handsome book, *Erinnerungen an Nietzsche* (Leipzig, 1901). Malvida von Meysenbug, Nietzsche's friend, has given, in her book *Individualitäten* (1901), pp. 1-41, an interesting picture of Nietzsche's personality. [A book of Nietzsche's, published in 1908, giving very interesting autobiographical contributions, is *Ecce Homo*. It was written in the autumn of 1888. Another important Nietzsche book is C. A.

Bernacilli's *Franz Overbeck and Friedrich Nietzsche* (Jena, 1908). A very instructive comparison between Schopenhauer and Nietzsche is given by Georg Simmel, *Schopenhauer und Nietzsche* (Berlin, 1907).]

⁴¹ (P. 177.) Nietzsche is always strict and unjust on Socrates. He can never abuse him sufficiently. In the *Geburt der Tragödie*, Socrates is attacked on account of his Intellectualism and his optimistic belief in life. Later (*Fröhliche Wissenschaft*, Aphor. 340) he is blamed for his pessimism, which Nietzsche finds in Plato's report of the last request to sacrifice a cock to Aesculapius. He treated life as a disease! In this Nietzsche takes up the traditional, Neo-Platonic version of the passage. Professor Heiberg has shown that it can be explained in a simpler, less mystical way, if one looks at its whole context (*vide* the *Proceedings of the Royal Danish Academy of Science*, 1902; J. L. Heiberg, *Sokrates' sidste Ord.*).

⁴⁵ (P. 178.) In his last book Nietzsche called his attitude Aristocratism (*Werke*, xv. p. 427). In this place Nietzsche would seem to be attacking Guyau and Fouillée, who lay such great weight on the sociological method and its importance for the philosophy of life.

⁴⁶ (P. 180.) Nietzsche's attitude has here undergone a change, for in the *Unzeitgemässen Betrachtungen* (pt. iii. § 5) it is the task of all men to work for the rise of great men. Here the dualism is not yet so sharp and so developed.

⁴⁷ (P. 182.) Nietzsche's copies of Guyau's books, with marginal notes, are to be found in the Nietzsche-Archiv at Weimar. Fouillée has copied the most important, and used them in an interesting chapter of his *Nietzsche et l'immoralisme* (1902), livre iii.: "Les jugements de Nietzsche sur Guyau d'après des documents inédits."

⁴⁸ (P. 184.) Cf. my *Ethik*, x. 3 (towards the end), on the importance of models on the analogy of the importance of variations for biology.

⁴⁹ (P. 189.) I do not follow the epistemological and metaphysical hints which Nietzsche gives in the third book of *Der Wille zur Macht*. His notion of the principles of knowledge recalls the economic-biological epistemology, while his metaphysics of will recalls still more decidedly Schopenhauer's philosophy (save that he speaks of the "will to power," and not of the "will to life").

⁵⁰ (P. 193.) The thought of the recurrence of all things is not new. Nietzsche has apparently his classical studies to thank for his introduction to it. It is an ancient thought, connected with the idea of the world as a restricted whole. Granted that elements and forces are imperishable, a rhythmic recurrence is necessary. In the Stoics such a recurrence appeared after every catastrophe both of gods and men. All was to happen again in the same way. Socrates is to marry Xanthippe again, etc. It was a pillar of the Stoic apathy that nothing new would happen (*vide* Marcus Aurelius, *Comm.* xi. 1). Neither would our descendants see anything really new, nor had our

forefathers seen another world than ours. In modern times this recurrence has often been treated as a supposed consequence of natural science, as by Blanqui, Le Bon, Nägeli, Guyau (cf. Fouillée, *Nietzsche et l'immoralisme*, iv. 3, "Le retour éternel"). The thought appears even in Dostojewski—as a temptation of the Devil! (cf. Merejkowskij, *Tolstoi et Dostojewski*, Paris, 1903, p. 300). Of course recurrence is only necessary if we presuppose the finitude of the world, and have a dogmatic faith in the absolute validity of scientific principles. On the other hand, we cannot think an absolute boundary of the world, behind time, space, and energy, and these principles are only working hypotheses for our scientists. The rise of new elements and new combinations is not impossible. The law of relativity leads us naturally in this direction, and, with possibility, brings us to the irrationality of existence. Cf. my *Problems of Phil.* chaps. ii. and iii. So that Goethe is really in the right when he says, "Experience is always new." The doctrine of recurrence is not consequent in Nietzsche. For, in his epistemology, he lays great weight on the fact that the principle of identity and the rest are postulates of our will, and express our wish to put nature under our power. We ourselves bring identity into nature. "One must understand the necessity of producing concepts, species, forms, ends, laws (a world of identical circumstances), as if we were able thereby to fixate the true world, but as the necessity of putting a world of our own to rights, so as to render our existence possible; we make thereby a world that is measurable, simple, comprehensible, etc., to us" (*Der Wille zur Macht*, Aphor. 279). If Nietzsche assumes that there are, in fact, identical circumstances, he is committed, in consequence, to belief in absolute recurrence. But experience shows only approximations to absolute identity and recurrence. Nietzsche's epistemology does not agree with his metaphysic. And yet he sometimes attacks science because it introduces equality before the law into nature!

⁵¹ (P. 214.) At this point James joins company with Leuba. "Leuba is undoubtedly right in contending that the conceptual belief . . . although so often efficacious and antecedent, is really accessory and non-essential, and that the joyous conviction can also come by far other channels than this conception. It is to the joyous conviction itself, the assurance that all is well with one, that he would give the name of faith *par excellence*" (*Varieties of Religious Experience*, p. 246 f.; cf. *The Will to Believe*, p. x). "What mankind at large most lacks is criticism and caution, not faith. Its cardinal weakness is to let belief follow recklessly on lively conception, especially when the conception has instinctive liking at its back." James adds that if he were speaking to the Salvation Army, or such bodies, he would not emphasise the will and the right to believe. Such bodies are far more in need of the "fresh nor'wester of science"

to seep out their infirmity and barbarity. But he is speaking to academic circles, which have other needs: "Paralysis of their native capacity for faith, and timorous *abulia* in the religious field are their special forms of mental weakness."

⁵² (P. 222.) Of philosophical criticisms of James's book, I will mention two, one from the psychologist Th. Flournoy of Geneva, in the *Revue philosophique* (November 1902), and the other, by J. M. Muirhead (Professor at Birmingham), in the *International Journal of Ethics* (January 1903). Flournoy is enthusiastic in his approval of James. Muirhead recognises his psychology but does not like his metaphysic.

[The later works of James develop his "Pragmatism." At the time when these lectures were delivered, it had not been worked out in full clearness.]

⁵³ (P. 231.) For Bergson's ideas on Greek philosophy and its consequences, see *La Perception du changement*, Oxford, 1911, p. 6, and *L'Évolution créatrice*, Paris, 1903, pp. 333-347.

⁵⁴ (P. 232.) In the autumn of 1905 I studied *Les Données immédiates* with a few students. In 1907 I summarised Bergson's doctrine, and criticised it in the *Lehrbuch der Geschichte der neueren Philosophie*; this study has since been translated into English (New York, 1912). In *Den menneskelige Tanke* ("Human Thought"), 1910 (French and German translations), I studied his conception of the immediate given in its connection with intelligence, from the psychological point of view (pp. 8 ff., 16 f.) (French ed. p. 8), his conception of will (pp. 292 f.) (French ed. p. 295), and his position with respect to a scientific metaphysic (pp. 315-318) (French ed. p. 318).

⁵⁵ (P. 234.) See *Den menneskelige Tanke*, pp. 56-58, on the relations of intuition and judgment (French ed. pp. 56-58).

⁵⁶ (P. 235.) *La Perception du changement*, pp. 5-6.

⁵⁷ (P. 237.) "Introduction à la métaphysique," pp. 4-9 (*Revue de métaphysique et de morale*, 1903).

⁵⁸ (P. 237.) See the discussion which took place at the Société Française de Philosophie, November 28, 1907 (*Bulletin de la Société Française de la Philosophie*, viii. pp. 18, 21).

⁵⁹ (P. 240.) I have studied most of the authors just quoted in my *History of Modern Philosophy* and in *Modern Philosophers*. Félix Ravaisson is best known for his book, *La Philosophie en France au XIX^e siècle* (Paris, 1868), Lachelier for his *Du fondement de l'induction* (1871) and his essay, *Psychologie et métaphysique* (1885). Both these works of Lachelier have been published in a volume of the *Bibliothèque de philosophie contemporaine* (1896). The work of Alfred Fouillée, with which we shall be concerned, which is very interesting from our point of view, was published a little time before his death. It is *La Pensée et les nouvelles écoles anti-*

intellectuelles (1910), and is in great measure directed against Bergson.

⁶⁰ (P. 243.) See *Modern Philosophers*, pp. 56-60. See also, on the whole subject, Dwelshauvers, *La Synthèse mentale*, Paris, 1908.

⁶¹ (P. 245.) *Revue scientifique*, 1875. Tannery was only later declared the author of the article. See Bergson, *Les Données immédiates*, p. 50, and Th. Ribot, *La Psychologie allemande contemporaine* (Paris, 1879), p. 200, 204 *et seq.* The quotation from Bergson just following is made from the above work, p. 42.

⁶² (P. 246.) *Les Données immédiates*, pp. 98, 103.

⁶³ (P. 247.) See on this point *Den menneskelige Tanke*, pp. 189-193. In his article entitled "Some Antecedents of the Philosophy of Bergson" (*Mind*, October 1913), Mr. Lovejoy has shown that Bergson had a precursor in Ravaisson in his neglect of the difference between the concept of number and that of quality. He thinks that the influence of Schelling can be traced through Ravaisson, who was among his followers at Munich.

⁶⁴ (P. 250.) *L'Évolution créatrice*, p. 150 ff., 179-182. I quote a characteristic passage: "Si la conscience qui sommeille dans l'instinct se réveillait, s'il s'intériorisait en connaissance au lieu de s'extérioriser en action, si nous savions l'interroger et s'il pouvait répondre, il nous livrerait les secrets les plus intimes de la vie" (p. 179).

⁶⁵ (P. 250.) *L'Évolution créatrice*, p. 192: "C'est à l'intérieur même de la vie que nous conduirait l'intuition, je veux dire l'instinct devenu désintéressé, conscient de lui-même, capable de réfléchir sur son objet et de l'élargir indéfiniment."

⁶⁶ (P. 252.) On p. 198 of *L'Évolution créatrice* occurs a most important passage: "La conscience se déterminant en intelligence, c'est-à-dire d'abord sur la matière, semble ainsi s'extérioriser par rapport à elle-même; mais, justement parce qu'elle s'adapte aux objets du dehors, elle arrive à circuler au milieu d'eux, à tourner les barrières qu'ils lui opposent, à élargir indéfiniment son domaine. Une fois libérée, elle peut d'ailleurs se replier à l'intérieur, et réveiller les virtualités d'intuition qui sommeillent encore en elle."

⁶⁷ (P. 253.) *Bulletin de la Société Française de Philosophie*, ix, p. 274.

⁶⁸ (P. 253.) See *Matière et mémoire* (6th ed.), p. 201 f.: "Ce qu'on appelle ordinairement un fait, ce n'est pas la réalité telle qu'elle apparaîtrait à une intuition immédiate. . . . L'intuition pure, extérieure ou intérieure, est celle d'une continuité indivisée." See also *La Perception du changement*, pp. 8, 23.

⁶⁹ (P. 254.) There are two Swedish works, one by Malte Jacobson (*Henri Bergson's Intuitionfilosofi*), the other by Professor Hans Larsson (*Intuitionsprobleme*), dealing particularly with the problem of intuition in Bergson's system, which may be of service in illuminating the concept of intuition as understood by Bergson.

⁷⁰ (P. 257.) Descartes, *Règles pour la direction de l'esprit*, chaps. iii. and vii. (*Œuvres*, ed. Adam et Tannery, vol. x.). Henri Poincaré, *Science et méthode*, Paris, 1912, pp. 47, 134, 157. See also Professor K. Kroman's "Anskuelsesskridt eller Elementarvurderinger" (*Vor Naturerkendelse*, p. 97 f.). It seems to me as if it were intuitions of this nature that led the Greek mathematicians to put forward postulates that were only demonstrated later. See Zeuthen, "Sur les connaissances géométriques des Grecs avant la réforme platonicienne" (*Bulletin de l'Académie Danoise*, 1914). See my *History of Modern Philosophy*, vol. i. p. 97-98. Leon Brunschweig, *Les Étapes de la philosophie mathématique*, pp. 105 ff., 451. Brunschweig calls the natural opposition made in our time between intelligence and intuition "un accident malheureux de l'histoire" (p. 452).

⁷¹ (P. 258.) See my *History of Modern Philosophy*, vol. i. pp. 305-307. Harold Joachim, *A Study of the Ethics of Spinoza*, Oxford, 1901, pp. 180-185. The phrase "folding together of general laws," used in the text, is due to H. C. Orsted; see *Danske Filosofer*, p. 51. For the part played by intuition in the conception of the world or in the development of a metaphysic, see *Den menneskelige Tanke*, pp. 306-315 (French ed. pp. 308-310). What Fichte understands by "intellectual intuition" is an immediate consciousness of our own acts, of our own activity upon ourselves. Every being that attributes an act to itself refers to this intuition (*Zweite Einleitung in die Wissenschaftslehre*, § 5). See my *History of Modern Philosophy*, p. 154 (vol. ii.). It is not Bergson's intuition, for it is an abstract thought, a hypothesis that may be taken from immediate phenomena, though not coincident with an immediate phenomenon. The supposition of activity, the idea that a state has arisen out of our own being and has not been provoked by external action, are founded on ratiocination and not on intuition, and this is why Kant was right to deny "intellectual intuition."

⁷² (P. 261.) *Matière et mémoire*, 3rd ed. p. 251; cf. pp. 4, 8, 66, 101.

⁷³ (P. 262.) *Matière et mémoire*, pp. 65, 93, 149 f.

⁷⁴ (P. 263.) *Matière et mémoire*, pp. 65, 251. The expression "perceptive" process, in reference to physiological processes in the sense-organs, appears also in works on physiology, even when, as in Betcherew's *Objective Psychologie* (Leipzig, 1913, p. 68), the author expressly declares that he puts all personal observation on one side. We read, e.g., of "perceptive organs," partly peripheral, partly central.

⁷⁵ (P. 264.) *Matière et mémoire*, p. 158. With respect to the foregoing, see pp. 60, 159, on the subject of the difference between perception and memory.

⁷⁶ (P. 265.) *Matière et mémoire*, p. 224.

⁷⁷ (P. 265.) See on this my *Psychology*, pp. 131-135. *Den menneskelige Tanke*, pp. 99-108 (French ed. pp. 99-108).

⁷⁸ (P. 266.) "L'Hypothèse de Spinoza comme hypothèse de travail" (*Bulletin de la Société Française de Philosophie*, i. p. 68); *Matière et mémoire*, p. 247.

⁷⁹ (P. 269.) Bergson, "L'Âme et le Corps" in *Le Matérialisme actuel*, which contains articles by several French savants, p. 24 ff. Kant's statement on this subject is to be found in the *Kritik der reinen Vernunft* (2nd ed.), pp. 806-808. William James, *Human Immortality* (1899). Spinoza's words are in *Ethica*, iii. 2 Schol.

⁸⁰ (P. 270.) Cf. *Den menneskelige Tanke*, pp. 227-237 (French ed. pp. 230-239).

⁸¹ (P. 272.) *L'Évolution créatrice*, Introduction.

⁸² (P. 272.) *L'Évolution créatrice*, pp. 22, 101.

⁸³ (P. 275.) *L'Évolution créatrice*, pp. 49-50.

⁸⁴ (P. 276.) *L'Évolution créatrice*, pp. 137-152.

⁸⁵ (P. 276.) *L'Évolution créatrice*, pp. 59-94.

⁸⁶ (P. 277.) *L'Évolution créatrice*, pp. 105-114, 273.

⁸⁷ (P. 277.) Jacques Loeb, *Das Leben* (1911), p. 9.

⁸⁸ (P. 278.) *L'Évolution créatrice*, p. 194: "Rattacher la vie soit à la conscience soit à quelque chose qui y ressemble." These are his own words, p. 279: "La vie est d'ordre psychologique." See on vitalism my *Psychology*, p. 33-34, and my *Mindre Arbejder*, 1st series, pp. 40-50. Bergson is not the first French philosopher to support these ideas. See especially Félix Ravaisson, *La Philosophie en France au XIX^e siècle*, p. 246. On the manner in which the question has been treated by French philosophers, consult the same work, pp. 168-182.

⁸⁹ (P. 279.) On the concept of evolution in romantic philosophy, see my *History of Modern Philosophy*, ii. p. 434. See also my essay, "Evolution and Modern Philosophy" (in *Darwin and Modern Science*, Cambridge, 1909, pp. 446-450).

⁹⁰ (P. 281.) See my *Psychology*, chaps. iv. and vii., and my essay, "Le Concept de la volonté" (*Revue de métaphysique et de morale*, 1907, pp. 1-17). I have already spoken of the position taken by Bergson with respect to the problem of will in *Den menneskelige Tanke*, pp. 291-295 (French ed. p. 295). Bergson treats the problem in *Les Données immédiates de la conscience*, chap. iii., "De l'organisation des états de la conscience: la liberté." The title of this chapter is characteristic, and in itself indicates his leanings.

⁹¹ (P. 282.) What Bergson calls "le moi fondamental" or "le moi d'en bas," responds exactly to what I call "the real ego" (*det reale Jeg*). See my *Psychology*, v. B. 5.

⁹² (P. 289.) See my *Psychology*, vi. E. 9.

⁹³ (P. 291.) "L'Intuition philosophique" (*Revue de métaphysique et de morale*, 1911, p. 813).

⁹⁴ (P. 293.) *Bulletin de la Société Française de Philosophie*, viii. p. 341; "Introduction à la métaphysique" (*Revue de métaphysique*

et de morale, 1903), p. 35. In several portions of *L'Évolution créatrice* the employment of analogy is significant; see, e.g., pp. 109 ff., 250, 278-281, 387. In *La Perception du changement*, pp. 7-9, Bergson takes exception to the building up of a system on a single part or aspect of existence, and he looks to avoid this fault by plunging into immediate perception, whence have issued all our conflicting concepts.

⁹⁵ (P. 293.) See on analogy and its significance, *Den menneskelige Tanke*, pp. 181-186, 310-315 (French ed. pp. 182, 313).

⁹⁶ (P. 295.) *L'Évolution créatrice*, pp. 270, 323. The definition of creation as growth is on p. 262.

⁹⁷ (P. 296.) See on pragmatism, *Den menneskelige Tanke*, pp. 270-272 (French ed. p. 272).

⁹⁸ (P. 296.) *L'Évolution créatrice*, p. 290 f.; "Introduction à la métaphysique," p. 19 f.

⁹⁹ (P. 297.) *La Perception du changement*, p. 36.

¹⁰⁰ (P. 298.) See further on this point my lectures at Helsingfors, on the principle of personality in philosophy (*Personlighetsprincipien i Filosofien*, Stockholm, 1911), pp. 7-38, and my paper on spiritual culture in *Mindre Arbejder*, 3rd series, pp. 4-6.

¹⁰¹ (P. 298.) *L'Évolution créatrice*, p. 280.

¹⁰² (P. 299.) *L'Évolution créatrice*, p. 192; *La Perception du changement*, pp. 9-13, 36; "L'Intuition philosophique" (*Revue de métaphysique et de morale*, 1912), p. 287.

¹⁰³ (P. 300.) See my *Philosophy of Religion*, §§ 44, 115-116, 131.

¹⁰⁴ (P. 301.) My only source for this discussion between Bergson and the Jesuit theologians is Marcel Hebert's article, "Henri Bergson et son affirmation de l'existence de Dieu" (*Coenobium, Rivista internazionale di liberi studi*, 1912). Reference may also be made to M. Édouard Roy's citation in his book, *La Philosophie nouvelle, Henri Bergson*, 2nd ed. p. 202, and *Les Annales de philosophie chrétienne*, March 1912.

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